REDACTED VERSION

Landfill Documents

( )



Tel: (512) 928-8905 Fax: (512) 928-3208

## **ANALYTICAL REPORT**

Doug Frick McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive

Suite 202

Austin, TX 78731

08/17/1992

JOB NO:

92.1729

SAMPLE NO:

81064

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION: MW-103

Date Taken: 07/16/1992

Date Received: 07/17/1992

Alkalinity, bicarb (CACO3)	620.	mg/L
		- · ·
Alkalinity, carbonate (CACO	<1.	mg/L
Alkalinity, phenol (CACO3)	<1.	mg/L
Alkalinity, total (CACO3)	620.	mg/L
Anion/Cation Balance	1.08	% Error
Chloride	454.	mg/L ·
Fluoride	0.4	mg/L
Hardness, Total	832.	mg/L
N-Nitrate	0.20	mg/L
	6.3	units
pH		
Solids, Total Dissolved	1,730.	mg/L
Specific Conductance	2,670.	umhos/cm
Sulfate, Turbidimetric	250.	mg/L
Total Organic Carbon (W) a	16.	mg/L
Total Organic Carbon (W) b	16.	mg/L
Total Organic Carbon (W) c	15.	mg/L.
Total Organic Carbon (W) d	17.	mg/L
Calcium, AA	270.	mg/L
•	3.3	mg/L
Iron, AA		
Magnesium, AA	37.	mg/L
Manganese, AA	7.8	mg/L
Potassium, AA	24.	mg/L
Sodium, AA	290.	mg/L







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## **ANALYTICAL REPORT**

Doug Frick McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive Suite 202 Austin, TX 78731 08/17/1992

JOB NO: 92.1729 SAMPLE NO: 81064

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION: MW-103

Date Taken: 07/16/1992 Date Received: 07/17/1992

VOLATILES	- 8240 AQUEOUS	
Acetone	<100.	ug/L
Acrolein	<10.0	ug/L
Acrylonitrile	<10.0	ug/L
Benzene	<5.0	ug/L
Bromodichloromethane	<5.0	ug/L
Bromoform	<5.0	ug/L
Bromomethane	<10.0	ug/L
2-Butanone	<100.	ug/L
Carbon disulfide	<5.0	ug/L
Carbon tetrachloride	<5.0	ug/L
Chlorobenzene	<5.0	ug/L
Chloroethane	<10.0	ug/L
2-Chloroethylvinyl ether	<10.0	ug/L
Chloroform	<5.0	ug/L
Chloromethane	<10.0	ug/L
Dibromochloromethane	<5.0	ug/L
1,1-Dichloroethane	<5.0	ug/L
1,2-Dichloroethane	<5.0	ug/L
1,1-Dichloroethene	<5.0	ug/L
cis-1,2-Dichloroethene	24.	ug/L
trans-1,2-Dichloroethene	<5.0	ug/L
1,2-Dichloropropane	<5.0	ug/L
cis-1,3-Dichloropropene	<5.0	ug/L
trans-1,3-Dichloropropene	<5.0	ug/L
Ethylbenzene	<5.0	ug/L
2-Hexanone	<50.0	ug/L
Methylene chloride	<5.0	ug/L
4-Methyl-2-pentanone	<50.	ug/L
Styrene	<5.0	ug/L







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Doug Frick

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Suite 202

Austin, TX 78731

08/17/1992

JOB NO:

92.1729

SAMPLE NO:

81064

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

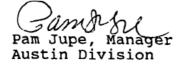
MW-103

Date Taken: 07/16/1992

Date Received: 07/17/1992

VOLATILES - 8240 AQUEOUS

VOLUTEL	OZ4O AQULOUS	
1,1,2,2-Tetrachloroethane	<5.0	ug/L
Tetrachloroethene	<5.0	ug/L
Toluene	<5.0	ug/L
1,1,1-Trichloroethane	<5.0	ug/L
1,1,2-Trichloroethane	<5.0	ug/L
Trichloroethene	<5.0	ug/L
Trichlorofluoromethane	<5.0	ug/L
Vinyl acetate	<50.0	ug/L
Vinyl chloride	27.	ug/L
Xylenes	<5.0	ug/L







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## ANALYTICAL REPORT

Doug Frick
McCULLEY, FRICK & GILMAN, INC.
5818 Balcones Drive
Suite 202

08/17/1992

JOB NO: SAMPLE NO: 92.1729 81065

> mg/L mg/L mg/L mq/L % Error mg/L mg/L mg/L mg/L units mg/L umhos/cm mg/L mg/L mg/L mg/L. mg/L mg/L mg/L mg/L mg/L mg/L mg/L

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION: MW-104

Date Taken: 07/16/1992

Austin, TX 78731

Date Received: 07/17/1992

Alkalinity, bicarb (CACO3)	380.
Alkalinity, carbonate (CACO	<1.
Alkalinity, phenol (CACO3)	<1.
Alkalinity, total (CACO3)	380.
Anion/Cation Balance	1.63
Chloride	70.
Fluoride	0.4
Hardness, Total	344.
N-Nitrate	3.59
рН	6.8
Solids, Total Dissolved	738.
Specific Conductance	1,130.
Sulfate, Turbidimetric	140.
Total Organic Carbon (W) a	1.
Total Organic Carbon (W) b	1.
Total Organic Carbon (W) c	1.
Total Organic Carbon (W) d	1.
Calcium, AA	134.
Iron, AA	0.08
Magnesium, AA	11.
Manganese, AA	<0.01
Potassium, AA	3.5
Sodium, AA	120.





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## ANALYTICAL REPORT

Doug Frick MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

08/17/1992

JOB NO:

92.1729

ug/L

ug/L

ug/L

ug/L

SAMPLE NO:

81065

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION: MW-104

Date Taken: 07/16/1992 Date Received: 07/17/1992

VOLATILES - 8240 AQUEOUS

# Acetone <100. <10.0 Acrolein <10.0 Acrylonitrile Benzene <5.0

2	10.0	~9/ D
Bromodichloromethane	<5.0	ug/L
Bromoform	<5.0	ug/L
Bromomethane	<10.0	ug/L
2-Butanone	<100.	ug/L
Carbon disulfide	<5.0	ug/L
Carbon tetrachloride	<5.0	ug/L
Chlorobenzene	<5.0	ug/L
Chloroethane	<10.0	ug/L
2-Chloroethylvinyl ether	<10.0	ug/L
Chloroform	<5.0	ug/L
Chloromethane	<10.0	ug/L
Dibromochloromethane	<5.0	ug/L
1,1-Dichloroethane	<5.0	ug/L
1,2-Dichloroethane	<5.0	ug/L
1,1-Dichloroethene	<5.0	ug/L
cis-1,2-Dichloroethene	<5.0	ug/L
trans-1,2-Dichloroethene	<5.0	ug/L
1,2-Dichloropropane	<5.0	ug/L
cis-1,3-Dichloropropene	<5.0	ug/L
trans-1,3-Dichloropropene	<5.0	ug/L
Ethylbenzene	<5.0	ug/L
2-Hexanone	<50.0	ug/L
Methylene chloride	<5.0	ug/L
4-Methyl-2-pentanone	<50.	ug/L
Styrene	<5.0	ug/L







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#### ANALYTICAL REPORT

Doug Frick

08/17/1992

MCCULLEY, FRICK & GILMAN, INC.

JOB NO:

92.1729

5818 Balcones Drive Suite 202

SAMPLE NO:

81065

Austin, TX 78731

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

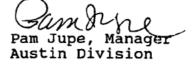
MW-104

Date Taken: 07/16/1992

Date Received: 07/17/1992

#### VOLATILES - 8240 AQUEOUS

AOTULTO		0240 AQUECUS	
1,1,2,2-Tetrachloroethane	:	<5.0	ug/L
Tetrachloroethene		<5.0	ug/L
Toluene		<5.0	ug/L
1,1,1-Trichloroethane -		<5.0	ug/L
1,1,2-Trichloroethane		<5.0	ug/L
Trichloroethene		<5.0	ug/L
Trichlorofluoromethane		<5.0	ug/L
Vinyl acetate		<50.0	ug/L
Vinyl chloride		<10.0	ug/L
Xylenes		<5.0	ug/L







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Doug Frick McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive

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08/17/1992

JOB NO:

92.1729

SAMPLE NO:

81066

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

MW-105

Date Taken: 07/16/1992

Date Received: 07/17/1992

Alkalinity, bicarb (CACO3)	344.	mg/L
Alkalinity, carbonate (CACO	<1.	mg/L
Alkalinity, phenol (CACO3)	<1.	mg/L
Alkalinity, total (CACO3)	344.	mg/L
Anion/Cation Balance	8.26	% Error
Chloride	50.	mg/L
Fluoride	0.5	mg/L
Hardness, Total	392.	mg/L
N-Nitrate	0.51	mg/L
рН	6.6	units
Solids, Total Dissolved	547.	mg/L
Specific Conductance	837.	umhos/cm
Sulfate, Turbidimetric	46.	mg/L '
Total Organic Carbon (W) a	3.	mg/L
Total Organic Carbon (W) b	3.	mg/L
Total Organic Carbon (W) c	2.	mg/L
Total Organic Carbon (W) d	2.	mg/L
Calcium, AA	143.	mg/L
Iron, AA	0.05	mg/L
Magnesium, AA	8.	mg/L
Manganese, AA	0.11	mg/L
Potassium, AA	2.9	mg/L
Sodium, AA	70.	mg/L







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08/17/1992

JOB NO:

92.1729

SAMPLE NO:

81066

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

MW-105

Date Taken: 07/16/1992

Date Received: 07/17/1992

#### VOLATILES - 8240 AQUEOUS

Acetone	<100.	ug/L
Acrolein	<10.0	ug/L
Acrylonitrile	<10.0	ug/L
Benzene	<5.0	ug/L
Bromodichloromethane	<5.0	ug/L
Bromoform	<5.0	ug/L
Bromomethane	<10.0	ug/L
2-Butanone	<100.	ug/L
Carbon disulfide	<5.0	ug/L
Carbon tetrachloride	<5.0	ug/L
Chlorobenzene	<5.0	ug/L
Chloroethane	<10.0	ug/L
2-Chloroethylvinyl ether	<10.0	ug/L
Chloroform	<5.0	ug/L
Chloromethane	<10.0	ug/L
Dibromochloromethane	<5.0	ug/L
1,1-Dichloroethane	<5.0	ug/L
1,2-Dichloroethane	<5.0	ug/L
1,1-Dichloroethene	<5.0	ug/L
cis-1,2-Dichloroethene	<5.0	ug/L
trans-1,2-Dichloroethene	<5.0	ug/L
1,2-Dichloropropane	<5.0	ug/L
cis-1,3-Dichloropropene	<5.0	ug/L
trans-1,3-Dichloropropene	<5.0	ug/L
Ethylbenzene	<5.0	ug/L
2-Hexanone	<50.0	ug/L
Methylene chloride	<5.0	ug/L
4-Methyl-2-pentanone	<50.	ug/L
Styrene	<5.0	ug/L







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## ANALYTICAL REPORT

Doug Frick

08/17/1992

McCULLEY, FRICK & GILMAN, INC.

JOB NO:

92.1729

5818 Balcones Drive

SAMPLE NO:

81066

Suite 202 Austin, TX 78731

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

MW-105

Date Taken: 07/16/1992

Date Received: 07/17/1992

#### VOLATILES - 8240 AOUEOUS

AOTHITTI	ES - 6240 MQUEOUS	
1,1,2,2-Tetrachloroethane	<5.0	ug/L
Tetrachloroethene	<5.0	ug/L
Toluene	<5.0	ug/L
1,1,1-Trichloroethane -	<5.0	ug/L
1,1,2-Trichloroethane	<5.0	ug/L
Trichloroethene	<5.0	ug/L
Trichlorofluoromethane	<5.0	ug/L
Vinyl acetate	<50.0	ug/L
Vinyl chloride	<10.0	ug/L
Xylenes	<5.0	ug/L







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## **ANALYTICAL REPORT**

Doug Frick McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81121

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION: MW-106

Date Taken: 07/17/1992 Date Received: 07/17/1992

Alkalinity, bicarb (CACO3) 324. mg/L Alkalinity, carbonate (CACO <1. mg/L	
Alkalinity, phenol (CACO3) <1. mg/L	
Alkalinity, total (CACO3) 324. mg/L	
Anion/Cation Balance 7.58 % Er	ror
Chloride 40. mg/L	
Fluoride 0.4 mg/L	
Hardness, Total 344. mg/L	
N-Nitrate 13.9 mg/L	
N-Nitrate/Nitrite 13.9 mg/L	
N-Nitrite <0.01 mg/L	
pH 7.1 ^ unit:	5
Solids, Total Dissolved 706. mg/L	
Specific Conductance 1,050. umhos	s/cm
Sulfate, Turbidimetric 130. mg/L	•
Total Organic Carbon (W) a 1. mg/L	
Total Organic Carbon (W) b 1. mg/L	
Total Organic Carbon (W) c 1. mg/L	
Total Organic Carbon (W) d 1. mg/L	
Calcium, AA 130. mg/L	
Iron, AA 0.12 mg/L	
Magnesium, AA 15. mg/L	
Manganese, AA 0.01 mg/L	
Potassium, AA 24. mg/L	
Sodium, AA 12. mg/L	

<sup>^</sup> Sample analyzed beyond holding time for parameter.







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## **ANALYTICAL REPORT**

Doug Frick McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive Suite 202 Austin, TX 78731

07/31/1992

JOB NO: 92.1731 SAMPLE NO: 81121

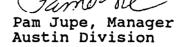
90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION: MW-106

Date Taken: 07/17/1992 Date Received: 07/17/1992

VOLATILES	- 8240 AQUEOUS	
Acetone	<100.	ug/L
Acrolein	<10.0	ug/L
Acrylonitrile	<10.0	ug/L
Benzene	<5.0	ug/L
Bromodichloromethane	<5.0	ug/L
Bromoform	<5.0	ug/L
Bromomethane	<10.0	ug/L
2-Butanone	<100.	ug/L
Carbon disulfide	<5.0	ug/L
Carbon tetrachloride	<5.0	ug/L
Chlorobenzene	<5.0	ug/L
Chloroethane	<10.0	ug/L
2-Chloroethylvinyl ether	<10.0	ug/L
Chloroform	<5.0	ug/L
Chloromethane	<10.0	ug/L
Dibromochloromethane	<5.0	ug/L
1,1-Dichloroethane	<5.0	ug/L
1,2-Dichloroethane	<5.0	ug/L
1,1-Dichloroethene	<5.0	ug/L
cis-1,2-Dichloroethene	<5.0	ug/L
trans-1,2-Dichloroethene	<5.0	ug/L
1,2-Dichloropropane	<5.0	ug/L
cis-1,3-Dichloropropene	<5.0	ug/L
trans-1,3-Dichloropropene	<5.0	ug/L
Ethylbenzene	<5.0	ug/L
2-Hexanone	<50.0	ug/L
Methylene chloride	<5.0	ug/L
4-Methyl-2-pentanone	<50.	ug/L
Styrene	<5.0	ug/L







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## **ANALYTICAL REPORT**

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McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

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Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81121

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

MW-106

Date Taken: 07/17/1992

Date Received: 07/17/1992

VOLATILES	- 8240 AQUEOUS	
1,1,2,2-Tetrachloroethane	<5.0	ug/L
Tetrachloroethene	<5.0	ug/L
Toluene	<5.0	ug/L
1,1,1-Trichloroethane	<5.0	ug/L
1,1,2-Trichloroethane	<5.0	ug/L
Trichloroethene	<5.0	ug/L
Trichlorofluoromethane	<5.0 <sup>-</sup>	ug/L
Vinyl acetate	<50.0	ug/L
Vinyl chloride	<10.0	ug/L
Xylenes	<5.0	ug/L





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## **ANALYTICAL REPORT**

Doug Frick

MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive Suite 202

Austin, TX 78731

08/17/1992

JOB NO:

92.1729

SAMPLE NO:

81067

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

MW-107

Date Taken: 07/16/1992

Date Received: 07/17/1992

Alkalinity, bicarb (CACO3)	282.	mg/L
Alkalinity, carbonate (CACO	<1.	mg/L
Alkalinity, phenol (CACO3)	<1.	mg/L
Alkalinity, total (CACO3)	282.	mg/L
Anion/Cation Balance	3.44	% Error
Chloride	28.	mg/L
Fluoride	0.4	mg/L
Hardness, Total	272.	mg/L
N-Nitrate	9.6	mg/L
рН	7.0	units
Solids, Total Dissolved	495.	mg/L
Specific Conductance	795.	umhos/cm
Sulfate, Turbidimetric	110.	mg/L
Total Organic Carbon (W) a	1.	mg/L
Total Organic Carbon (W) b	ī.	mg/L
Total Organic Carbon (W) c	1.	mg/L
Total Organic Carbon (W) d	î.	mg/L
Calcium, AA	100.	mg/L
Iron, AA	0.10	mg/L
Magnesium, AA	9.	mg/L
Manganese, AA	0.02	mg/L
Potassium, AA	22.	mg/L
Sodium, AA	70.	•
Soutum, AA	70.	mg/L







Tel: (512) 928-8905 Fax: (512) 928-3208

## ANALYTICAL REPORT

<5.0

<5.0

<5.0

<50.

<5.0

<50.0

Doug Frick
McCULLEY, FRICK & GILMAN, INC.
5818 Balcones Drive

5818 Balcones Drive Suite 202

Austin, TX 78731

08/17/1992

JOB NO:

92.1729

ug/L

SAMPLE NO:

81067

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION: MW-107

trans-1,3-Dichloropropene

Ethylbenzene

Methylene chloride

4-Methyl-2-pentanone

2-Hexanone

Styrene

Date Taken: 07/16/1992

Date Received: 07/17/1992

#### VOLATILES - 8240 AQUEOUS Acetone <100. Acrolein <10.0 Acrylonitrile <10.0 Benzene <5.0 Bromodichloromethane <5.0 Bromoform <5.0 Bromomethane <10.0 2-Butanone <100. Carbon disulfide <5.0 Carbon tetrachloride <5.0 Chlorobenzene <5.0 Chloroethane <10.0 2-Chloroethylvinyl ether <10.0 Chloroform <5.0 Chloromethane <10.0 Dibromochloromethane <5.0 1,1-Dichloroethane <5.0 1,2-Dichloroethane <5.0 1,1-Dichloroethene <5.0 cis-1,2-Dichloroethene <5.0 trans-1,2-Dichloroethene <5.0 1,2-Dichloropropane <5.0 cis-1,3-Dichloropropene <5.0

ug/L uq/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L uq/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L







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## **ANALYTICAL REPORT**

Doug Frick

McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

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08/17/1992

JOB NO:

92.1729

SAMPLE NO:

81067

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

MW-107

Date Taken: 07/16/1992

Date Received: 07/17/1992

VOLATILES	- 8240 AQUEOUS	
1,1,2,2-Tetrachloroethane	<5.0	ug/L
Tetrachloroethene	<5.0	ug/L
Toluene	<5.0	ug/L
1,1,1-Trichloroethane -	<5.0	ug/L
1,1,2-Trichloroethane	<5.0	ug/L
Trichloroethene	<5.0	ug/L
Trichlorofluoromethane	<5.0	ug/L
Vinyl acetate	<50.0	ug/L
Vinyl chloride	<10.0	ug/L
Xylenes	<5.0	ug/L







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## ANALYTICAL REPORT

Doug Frick McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81123

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

<mark>(b)(6)</mark> Well

Date Taken: 07/17/1992

Date Received:

07/17/1992

Chloride pH Solids, Total Dissolved Specific Conductance 30. 7.2 ^ 346. 513. mg/L units mg/L umhos/cm

^ Sample analyzed beyond holding time for parameter.







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## **ANALYTICAL REPORT**

Doug Frick McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81123

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

Well

Date Taken: 07/17/1992 Date Received: 07/17/1992

	VOLATILES	- 8240 AQUEOU	S
Acetone		<100.	ug/L
Acrolein		<10.0	ug/L
Acrylonitrile		<10.0	ug/L
Benzene		<5.0	ug/L
Bromodichloromethane		<5.0	ug/L
Bromoform		<5.0	ug/L
Bromomethane		<10.0	ug/L
2-Butanone		<100.	ug/L
Carbon disulfide		<5.0	ug/L
Carbon tetrachloride	<u>!</u>	<5.0	ug/L
Chlorobenzene		<5.0	ug/L
Chloroethane		<10.0	ug/L
2-Chloroethylvinyl e	ther	<10.0	ug/L
Chloroform		<5.0	ug/L
Chloromethane		<10.0	ug/L
Dibromochloromethane	1	<5.0	ug/L
1,1-Dichloroethane		<5.0	ug/L
1,2-Dichloroethane		<5.0	ug/L
1,1-Dichloroethene		<5.0	ug/L
cis-1,2-Dichloroethe	ne	<5.0	ug/L
trans-1,2-Dichloroet	hene	<5.0	ug/L
1,2-Dichloropropane		<5.0	ug/L
cis-1,3-Dichloroprop	ene	<5.0	ug/L
trans-1,3-Dichloropr	opene	<5.0	ug/L
Ethylbenzene		<5.0	ug/L
2-Hexanone	•	<50.0	ug/L
Methylene chloride		<5.0	ug/L
4-Methyl-2-pentanone	<b>!</b> .	<50.	ug/L
Styrene	•	<5.0	ug/L
-			J/







Tel: (512) 928-8905 Fax: (512) 928-3208

## ANALYTICAL REPORT

Doug Frick

MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81123

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6)

Vell

Date Taken: 07/17/1992

Date Received: 07/17/1992

VOLATILES - 8240 AQUEOUS

	02.0 1.202000	
1,1,2,2-Tetrachloroethane	<5.0	ug/L
Tetrachloroethene .	<5.0	ug/L
Toluene	<5.0	ug/L
1,1,1-Trichloroethane	<5.0	ug/L
1,1,2-Trichloroethane	<5.0	ug/L
Trichloroethene	<5.0	ug/L
Trichlorofluoromethane	<5.0	ug/L
Vinyl acetate	<50.0	ug/L
Vinyl chloride	<10.0	ug/L
Xylenes	<5.0	ug/L
•		





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## ANALYTICAL REPORT

Doug Frick
McCULLEY, FRICK & GILMAN, INC.
5818 Balcones Drive
Suite 202
Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81124

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6)

TX BS

Date Taken: 07/17/1992

Date Received: 07/17/1992

Chloride 200.
pH 7.0 ^
Solids, Total Dissolved 768.
Specific Conductance 1,250.

units mg/L umhos/cm

mq/L

^ Sample analyzed beyond holding time for parameter.





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## ANALYTICAL REPORT

Doug Frick McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81124

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6)

TX BS

Date Taken: 07/17/1992 Da

992 Date Received: 07/17/1992

V	OLATILES	- 8240	AQUEOUS	-
Acetone		<100.		ug/L
Acrolein		<10.0		ug/L
Acrylonitrile		<10.0		ug/L
Benzene	•	<5.0		ug/L
Bromodichloromethane		<5.0		ug/L
Bromoform		<5.0		ug/L
Bromomethane		<10.0		ug/L
2-Butanone		<100.		ug/L
Carbon disulfide	•	<5.0		ug/L
Carbon tetrachloride		<5.0		ug/L
Chlorobenzene		<5.0		ug/L
Chloroethane		<10.0		ug/L
2-Chloroethylvinyl eth	er	<10.0		ug/L
Chloroform		<5.0		ug/L
Chloromethane		<10.0		ug/L
Dibromochloromethane		<5.0		ug/L
1,1-Dichloroethane		<5.0		ug/L
1,2-Dichloroethane		<5.0		ug/L
1,1-Dichloroethene		<5.0		ug/L
cis-1,2-Dichloroethene	<b>!</b>	<5.0		ug/L
trans-1,2-Dichloroethe	ne	<5.0		ug/L
1,2-Dichloropropane		<5.0		ug/L
cis-1,3-Dichloropropen	e	<5.0		ug/L
trans-1,3-Dichloroprop	ene	<5.0	•	ug/L
Ethylbenzene		<5.0		ug/L
2-Hexanone		<50.0		ug/L
Methylene chloride		<5.0		ug/L
4-Methyl-2-pentanone		<50.		ug/L
Styrene		<5.0		ug/L







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#### ANALYTICAL REPORT

Doug Frick

MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81124

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6)

TX BS

Date Taken: 07/17/1992

Date Received: 07/17/1992

VOLATILES - 8240 AQUEOUS

***************************************	or or neoron	
1,1,2,2-Tetrachloroethane	<5.0	ug/L
Tetrachloroethene	<5.0	ug/L
Toluene	<5.0	ug/L
1,1,1-Trichloroethane	<5.0	ug/L
1,1,2-Trichloroethane	<5.0	ug/L
Trichloroethene	<5.0	ug/L
Trichlorofluoromethane	<5.0	ug/L
Vinyl acetate	<50.0	ug/L
Vinyl chloride	<10.0	ug/L
Xylenes	<5.0	ug/L
_		







Tel: (512) 928-8905 Fax: (512) 928-3208

#### ANALYTICAL REPORT

Doug Frick McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive Suite 202 Austin, TX 78731 07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81125

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6)

Date Taken: 07/17/1992

Date Received: 07/1

07/17/1992

Chloride 124.
pH 6.7 ^
Solids, Total Dissolved 751.
Specific Conductance 1,110.

mg/L units mg/L umhos/cm

^ Sample analyzed beyond holding time for parameter.





Tel: (512) 928-8905 Fax: (512) 928-3208

## ANALYTICAL REPORT

Doug Frick

McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81125

90-3135-5

San Marcos Landfill

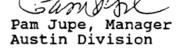
SAMPLE DESCRIPTION:

b) (6)

Date Taken: 07/17/1992

Date Received: 07/17/1992

VOLATILES	- 8240 AQUEOUS	
Acetone	<100.	ug/L
Acrolein	<10.0	ug/L
Acrylonitrile	<10.0	ug/L
Benzene	<5.0	ug/L
Bromodichloromethane	<5.0	ug/L
Bromoform	<5.0	ug/L
Bromomethane	<10.0	ug/L
2-Butanone	<100.	ug/L
Carbon disulfide	<5.0	ug/L
Carbon tetrachloride	<5.0	ug/L
Chlorobenzene	<5.0	ug/L
Chloroethane	<10.0	ug/L
2-Chloroethylvinyl ether	<10.0	ug/L
Chloroform	<5.0	ug/L
Chloromethane	<10.0	ug/L
Dibromochloromethane	<5.0	ug/L.
1,1-Dichloroethane	<5.0	ug/L
1,2-Dichloroethane	<5.0	ug/L
1,1-Dichloroethene	<5.0	ug/L
cis-1,2-Dichloroethene	<5.0	ug/L
trans-1,2-Dichloroethene	<5.0	ug/L
1,2-Dichloropropane	<5.0	ug/L
cis-1,3-Dichloropropene	<5.0	ug/L
trans-1,3-Dichloropropene	<5.0	ug/L
Ethylbenzene	<5.0	ug/L
2-Hexanone	<50.0	ug/L
Methylene chloride	<5.0	ug/L
4-Methyl-2-pentanone	<50.	ug/L
Styrene	<5.0	ug/L







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#### ANALYTICAL REPORT

Doug Frick

MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81125

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6

Date Taken: 07/17/1992 Date Received: 07/17/1992

VOLATILES - 8240 AQUEOUS 1,1,2,2-Tetrachloroethane <5.0 ug/L Tetrachloroethene <5.0 ug/L Toluene <5.0 ug/L 1,1,1-Trichloroethane <5.0 ug/L 1,1,2-Trichloroethane <5.0 ug/L Trichloroethene <5.0 ug/L Trichlorofluoromethane <5.0 ug/L Vinyl acetate <50.0 ug/L Vinyl chloride <10.0 ug/L Xylenes <5.0 ug/L







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## **ANALYTICAL REPORT**

Doug Frick MCCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81126

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

Date Taken: 07/17/1992

Date Received: 07/17/1992

102. Chloride 6.8 ^ pН Solids, Total Dissolved 787. Specific Conductance 1,220.

mg/L units mg/L umhos/cm

^ Sample analyzed beyond holding time for parameter.





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## **ANALYTICAL REPORT**

Doug Frick McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81126

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6)

Date Taken: 07/17/1992 Date Receive

Date Received: 07/17/1992

	OLATILES	- 8240	AQUEOUS	
Acetone		<100.		ug/L
Acrolein		<10.0		ug/L
Acrylonitrile		<10.0		ug/L
Benzene		<5.0		ug/L
Bromodichloromethane		<5.0		ug/L
Bromoform		<5.0		ug/L
Bromomethane		<10.0		ug/L
2-Butanone		<100.		ug/L
Carbon disulfide		<5.0		ug/L
Carbon tetrachloride		<5.0		ug/L
Chlorobenzene		<5.0		ug/L
Chloroethane		<10.0		ug/L
2-Chloroethylvinyl eth	er	<10.0		ug/L
Chloroform		<5.0		ug/L
Chloromethane		<10.0		ug/L
Dibromochloromethane		<5.0		ug/L.
1,1-Dichloroethane		<5.0		ug/L
1,2-Dichloroethane		<5.0		ug/L
1,1-Dichloroethene		<5.0		ug/L
cis-1,2-Dichloroethene		<5.0		ug/L
trans-1,2-Dichloroethe	ene	<5.0		ug/L
1,2-Dichloropropane		<5.0		ug/L
cis-1,3-Dichloroproper		<5.0		ug/L
trans-1,3-Dichloroprop	ene	<5.0 ·		ug/L
Ethylbenzene		<5.0		ug/L
2-Hexanone		<50.0		ug/L
Methylene chloride		<5.0		ug/L
4-Methyl-2-pentanone		<50.		ug/L
Styrene		<5.0		ug/L







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## ANALYTICAL REPORT

Doug Frick McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

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Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81126

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6)

Date Taken: 07/17/1992

Date Received: 07/17/1992

VOLATILES - 8240 AQUEOUS 1,1,2,2-Tetrachloroethane <5.0 ug/L Tetrachloroethene <5.0 ug/L Toluene <5.0 ug/L 1,1,1-Trichloroethane <5.0 ug/L 1,1,2-Trichloroethane <5.0 ug/L Trichloroethene <5.0 ug/L Trichlorofluoromethane <5.0 ug/L Vinyl acetate <50.0 ug/L Vinyl chloride <10.0 ug/L Xylenes <5.0 ug/L





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## ANALYTICAL REPORT

Doug Frick

McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81127

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6)

Pecan Grove

Date Taken: 07/17/1992

Date Received: 07/17/1992

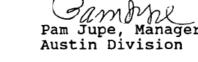
Chloride
pH
Solids, Total Dissolved
Specific Conductance

7.1 ^ 559. 684.

14.

mg/L units mg/L umhos/cm

Sample analyzed beyond holding time for parameter.







Tel: (512) 928-8905 Fax: (512) 928-3208

## **ANALYTICAL REPORT**

Doug Frick McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81127

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

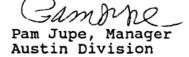
(b)(6)

Pecan Grove

Date Taken: 07/17/1992

Date Received: 07/17/1992

VOLATILES	- 8240 AQUEOUS	
Acetone	<100.	ug/L
Acrolein	<10.0	ug/L
Acrylonitrile	<10.0	ug/L
Benzene	<5.0	ug/L
Bromodichloromethane	<5.0	ug/L
Bromoform	<5.0	ug/L
Bromomethane	<10.0	ug/L
2-Butanone	<100.	ug/L
Carbon disulfide	<5.0	ug/L
Carbon tetrachloride	<5.0	ug/L
Chlorobenzene	<5.0	ug/L
Chloroethane	<10.0	ug/L
2-Chloroethylvinyl ether	<10.0	ug/L
Chloroform	<5.0	ug/L
Chloromethane	<10.0	ug/L
Dibromochloromethane	<5.0	ug/L·
1,1-Dichloroethane	<5.0	ug/L
1,2-Dichloroethane	<5.0	ug/L
1,1-Dichloroethene	<5.0	ug/L
cis-1,2-Dichloroethene	<5.0	ug/L
trans-1,2-Dichloroethene	<5.0	ug/L
1,2-Dichloropropane	<5.0	ug/L
cis-1,3-Dichloropropene	<5.0	ug/L
trans-1,3-Dichloropropene	<5.0	ug/L
Ethylbenzene	<5.0	ug/L
2-Hexanone	<50.0	ug/L
Methylene chloride	<5.0	ug/L
4-Methyl-2-pentanone	<50.	ug/L
Styrene	<5.0	ug/L







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## ANALYTICAL REPORT

Doug Frick

MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

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Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81127

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6)

Pecan Grove

Date Taken: 07/17/1992

Date Received: 07/17/1992

	- 8240 AQUEOUS	
1,1,2,2-Tetrachloroethane	<5.0	ug/L
Tetrachloroethene	<5.0	ug/L
Toluene	<5.0	ug/L
1,1,1-Trichloroethane	<5.0	ug/L
1,1,2-Trichloroethane	<5.0	ug/L
Trichloroethene	<5.0	ug/L
Trichlorofluoromethane	<5.0	ug/L
Vinyl acetate	<50.0	ug/L
Vinyl chloride	<10.0	ug/L
Xylenes	<5.0	ug/L





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## **ANALYTICAL REPORT**

Doug Frick

MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81128

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b)(6)

Residence

Date Taken: 07/17/1992

Date Received: 07/17/1992

Chloride 18.
pH 7.1 ^
Solids, Total Dissolved 549.
Specific Conductance 828.

mg/L units mg/L umhos/cm

^ Sample analyzed beyond holding time for parameter.



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## **ANALYTICAL REPORT**

Doug Frick MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81128

90-3135-5

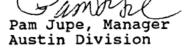
San Marcos Landfill

SAMPLE DESCRIPTION:

Residence

Date Taken: 07/17/1992 Date Received: 07/17/1992

VOLAT	ILES - 8240 AQUEOUS	
Acetone	<100.	ug/L
Acrolein	<10.0	ug/L
Acrylonitrile	<10.0	ug/L
Benzene	<5.0	ug/L
Bromodichloromethane	<5.0	ug/L
Bromoform	<5.0	ug/L
Bromomethane	<10.0	ug/L
2-Butanone	<100.	ug/L
Carbon disulfide	<5.0	ug/L
Carbon tetrachloride	<5.0	ug/L
Chlorobenzene	<5.0	ug/L
Chloroethane	<10.0	ug/L
2-Chloroethylvinyl ether	<10.0	ug/L
Chloroform	<5.0	ug/L
Chloromethane	<10.0	ug/L
Dibromochloromethane	<5.0	ug/L.
1,1-Dichloroethane	<5.0	ug/L
1,2-Dichloroethane	<5.0	ug/L
1,1-Dichloroethene	<5.0	ug/L
cis-1,2-Dichloroethene	<5.0	ug/L
trans-1,2-Dichloroethene	<5.0	ug/L
1,2-Dichloropropane	<5.0	ug/L
cis-1,3-Dichloropropene	<5.0	ug/L
trans-1,3-Dichloropropene	<5.0	ug/L
Ethylbenzene	<5.0	ug/L
2-Hexanone	<50.0	ug/L
Methylene chloride	<5.0	ug/L
4-Methyl-2-pentanone	<50.	ug/L
Styrene	<5.0	ug/L







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#### ANALYTICAL REPORT

Doug Frick McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81128

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6)

Residence

Date Taken: 07/17/1992

Date Received: 07/17/1992

VOLATILES - 8240 AQUEOUS 1,1,2,2-Tetrachloroethane <5.0 ug/L Tetrachloroethene <5.0 ug/L Toluene <5.0 ug/L 1,1,1-Trichloroethane <5.0 ug/L ug/L 1,1,2-Trichloroethane <5.0 ug/L -<5.0 Trichloroethene Trichlorofluoromethane ug/L <5.0 ug/L <50.0 Vinyl acetate ug/L Vinyl chloride <10.0 Xylenes <5.0 ug/L





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## ANALYTICAL REPORT

Doug Frick

MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO: 81129

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b)(6)

Date Taken: 07/17/1992

Date Received: 07/17/1992

Chloride 30.
pH 7.0 ^
Solids, Total Dissolved 563.
Specific Conductance 1,010.

mg/L units mg/L umhos/cm

^ Sample analyzed beyond holding time for parameter.





Tel: (512) 928-8905 Fax: (512) 928-3208

## **ANALYTICAL REPORT**

Doug Frick
McCULLEY, FRICK & GILMAN, INC.
5818 Balcones Drive
Suite 202
Austin, TX 78731

07/31/1992

JOB NO: 92.1731 SAMPLE NO: 81129

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b) (6)

Date Taken: 07/17/1992 Date Received: 07/17/1992

VOLATILES	- 8240 AQUEOUS	
Acetone	<100.	ug/L
Acrolein	<10.0	ug/L
Acrylonitrile	<10.0	ug/L
Benzene	<5.0	ug/L
Bromodichloromethane	<5.0	ug/L
Bromoform	<5.0	ug/L
Bromomethane	<10.0	ug/L
2-Butanone	<100.	ug/L
Carbon disulfide	<5.0	ug/L
Carbon tetrachloride	<5.0	ug/L
Chlorobenzene	<5.0	ug/L
Chloroethane	<10.0	ug/L
2-Chloroethylvinyl ether	<10.0	ug/L
Chloroform	<5.0	ug/L
Chloromethane	<10.0	ug/L
Dibromochloromethane	<5.0	ug/L
1,1-Dichloroethane	<5.0	ug/L
1,2-Dichloroethane	<5.0	ug/L
1,1-Dichloroethene	<5.0	ug/L
cis-1,2-Dichloroethene	<5.0	ug/L
trans-1,2-Dichloroethene	<5.0	ug/L
1,2-Dichloropropane	<5.0	ug/L
cis-1,3-Dichloropropene	<5.0	ug/L
trans-1,3-Dichloropropene	<5.0	ug/L
Ethylbenzene	<5.0	ug/L
2-Hexanone	<50.0	ug/L
Methylene chloride	<5.0	ug/L
4-Methyl-2-pentanone	<50.	ug/L
Styrene	<5.0	ug/L







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#### **ANALYTICAL REPORT**

Doug Frick McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO: 81129

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

(b)(6)

Date Taken: 07/17/1992

Date Received: 07/17/1992

VOLATILES	- 8240 AQUEOUS	
1,1,2,2-Tetrachloroethane	<5.0	ug/L
Tetrachloroethene	<5.0	ug/L
Toluene	<5.0	ug/L
1,1,1-Trichloroethane	<5.0	ug/L
1,1,2-Trichloroethane	<5.0	ug/L
Trichloroethene	<5.0	ug/L
Trichlorofluoromethane	<5.0	ug/L
Vinyl acetate	<50.0	ug/L
Vinyl chloride	<10.0	ug/L
Xylenes	<5.0	ug/L

Pam Jupe, Manager Austin Division





Tel: (512) 928-8905 Fax: (512) 928-3208

# **ANALYTICAL REPORT**

Doug Frick McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive Suite 202

08/17/1992

JOB NO: SAMPLE NO: 92.1729

81068

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

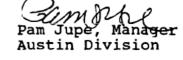
Austin, TX 78731

Field Blank

Date Taken: 07/17/1992

Date Received: 07/17/1992

VOLATILES	- 8240 AQUEOUS	
Acetone	<100.	ug/L
Acrolein	<10.0	ug/L
Acrylonitrile	<10.0	ug/L
Benzene	<5.0	ug/L
Bromodichloromethane	<5.0	ug/L
Bromoform	<5.0	ug/L
Bromomethane	<10.0	ug/L
2-Butanone	<100.	ug/L
Carbon disulfide	<5.0	ug/L
Carbon tetrachloride	<5.0	ug/L
Chlorobenzene	<5.0	ug/L
Chloroethane	<10.0	ug/L
2-Chloroethylvinyl ether	<10.0	ug/L
Chloroform	<5.0	ug/L
Chloromethane	<10.0	ug/L
Dibromochloromethane	<5.0	ug/L
1,1-Dichloroethane	<5.0	ug/L
1,2-Dichloroethane	<5.0	ug/L
1,1-Dichloroethene	<5.0	ug/L
cis-1,2-Dichloroethene	<5.0	ug/L
trans-1,2-Dichloroethene	<5.0	ug/L
1,2-Dichloropropane	<5.0	ug/L
cis-1,3-Dichloropropene	<5.0	ug/L
trans-1,3-Dichloropropene	<5.0	ug/L
Ethylbenzene	<5.0	ug/L
2-Hexanone	<50.0	ug/L
Methylene chloride	<5.0	ug/L
4-Methyl-2-pentanone	<50.	ug/L
Styrene	<5.0	ug/L







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# **ANALYTICAL REPORT**

Doug Frick

MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

08/17/1992

JOB NO:

92.1729

SAMPLE NO:

81068

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

Field Blank

Date Taken: 07/17/1992

Date Received: 07/17/1992

# VOLATILES - 8240 AQUEOUS coethane <5.0

1,1,2,2-Tetrachloroethane	<5.0	ug/L
Tetrachloroethene	<5.0	ug/L
Toluene	<5.0	ug/L
1,1,1-Trichloroethane	<5.0	ug/L
1,1,2-Trichloroethane	<5.0	ug/L
Trichloroethene	<5.0	ug/L
Trichlorofluoromethane	<5.0	ug/L
Vinyl acetate	<50.0	ug/L
Vinyl chloride	<10.0	ug/L
Xylenes	<5.0	ug/L







Tel: (512) 928-8905 Fax: (512) 928-3208

#### ANALYTICAL REPORT

Doug Frick
McCULLEY FRICK & GILMAN

McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81130

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

MW-106 (duplicate)

Date Taken: 07/17/1992

Date Received: 07/17/1992

	VOLATILES	- 8240	AQUEOUS		
Acetone	:	<100.			ug/L
Acrolein		<10.0			ug/L
Acrylonitrile		<10.0			ug/L
Benzene	-	<5.0			ug/L
Bromodichloromethane		<5.0			ug/L
Bromoform		<5.0			ug/L
Bromomethane		<10.0		€	ug/L
2-Butanone		<100.			ug/L
Carbon disulfide		<5.0			ug/L
Carbon tetrachloride		<5.0			ug/L
Chlorobenzene		<5.0			ug/L
Chloroethane		<10.0			ug/L
2-Chloroethylvinyl e	ther	<10.0			ug/L
Chloroform		<5.0			ug/L
Chloromethane		<10.0			ug/L
Dibromochloromethane		<5.0			ug/L
1,1-Dichloroethane		<5.0			ug/L
1,2-Dichloroethane		<5.0			ug/L
1,1-Dichloroethene		<5.0			ug/L
cis-1,2-Dichloroether	ne .	<5.0			ug/L
trans-1,2-Dichloroet	nene	<5.0			ug/L
1,2-Dichloropropane		<5.0			ug/L
cis-1,3-Dichloroprop	ene	<5.0			ug/L
trans-1,3-Dichloropre	opene	<5.0			ug/L
Ethylbenzene		<5.0			ug/L
2-Hexanone		<50.0			ug/L
Methylene chloride		<5.0			ug/L
4-Methyl-2-pentanone		<50.			ug/L
Styrene		<5.0			ug/L







Tel: (512) 928-8905 Fax: (512) 928-3208

#### **ANALYTICAL REPORT**

Doug Frick

McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81130

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

MW-106 (duplicate)

Date Taken: 07/17/1992

Xylenes

Date Received: 07/17/1992

ug/L

VOLATILES	- 8240 AQUEOUS	
1,1,2,2-Tetrachloroethane	<5.0	ug/L
Tetrachloroethene	<5.0	ug/L
Toluene	<5.0	ug/L
1,1,1-Trichloroethane -	<5.0	ug/L
1,1,2-Trichloroethane	<5.0	ug/L
Trichloroethene	<5.0	ug/L
Trichlorofluoromethane	<5.0	ug/L
Vinyl acetate	<50.0	ug/L
Vinvl chloride	<10.0	ug/L

<5.0





#### CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS NO.90-3135-5 McCULLEY, FRICK & GILMAN, INC. 3300 Arapahoe Ave., Suite 218 5818 Balcones Dr., Suite 202 5 Third St., Suite 916 Boulder, CO 80303 San Francisco, CA 94103 Austin, TX 78731 TEL: (303) 447-1823 TEL: (415) 495-7110 TEL: (512) 371-1667 FAX: (303) 447-1836 FAX: (415) 495-7107 FAX: (512) 454-4126 PROJECT No.: 90-3135 au Marios DATE: 7-17-4 SAMPLER (Signature): METHOD OF SHIPMENT: DESTINATION: 1 CARRIER/ WAYBILL NO SPECIAL INSTRUCTIONS/HAZARDS: Vernovelneusive SAMPLES ANALYSIS REQUEST Preservation Containers\* Methods Handling **REMARKS** EPA 602/8020 EPA 624/8240 EPA 625/8270 TPH as Gasoline TPH as Diesel (Special handling Sample STANDARD procedures, specific Collection analytical methods. OTHER NONE COLD Lab Sample S N H VQL. observations, etc.) 로 Matrix\* Identification TIME DATE No. 7/16/92 1305 MULIOZ 11 G Field Filtered P 11 1) u MW-103 G 1400 2 4 Ш 11 h 11 1000 LABORATORY COMMENTS/ CONDITION OF SAMPLES RECEIVED BY: RELINQUISHED BY: DATE TIME COMPANY SIGNATURE PRINTED NAME PRINTED NAME **COMPANY** M. James 110 LABORATORY Containers P-plastic G-glass T-tellon B-brass OT-other AQ-aqueous NA-nonaqueous SQ-soil SL-sludge P-petroleum

PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

DISTRIBUTION:

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SAMPLER (Signature):  METHOD OF SHIPMENT: HAND Deliver CARRIER/ WAYBILL NOW/W/6 DESTINATION: NET Austi														-1,7-9	<u>3</u> 2.															
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"KEY: Matri	ix AQ-aqueous NA-n	onaqueous SO	soi SL-ski	idge P.p.	etroleum						iners P-plastic	-			-															
						2	NSTRIB	UTION:	PINI	K: Fiel	d Copy YELLO	OW: La	borator	у Сор	y Wi	HITE:	Return	to Origi	inator											

#### CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS NO.40-3135-5 McCULLEY, FRICK & GILMAN, INC. 3300 Arapahoe Ave., Suite 218 5818 Balcones Dr., Suite 202 5 Third St., Suite 916 Boulder, CO 80303 San Francisco, CA 94103 Austin, TX 78731 TEL: (303) 447-1823 TEL: (415) 495-7110 TEL: (512) 371-1667 FAX: (303) 447-1836 FAX: (415) 495-7107 FAX: (512) 454-4126 PROJECT No.: 90-3135 larcos PROJECT NAME: PAGE: SAMPLER (Signature): DATE: 7 METHOD OF SHIPMENT: CARRIER/ WAYBILL NO DESTINATION: SPECIAL INSTRUCTIONS/HAZARDS: "empre pusice ANALYSIS REQUEST SAMPLES Handling Preservation Containers\* Methods REMARKS TPH as Gasoline TPH as Diesel EPA 601/8010 EPA 602/8020 EPA 624/8240 EPA 625/8270 (Special handling Sample STANDARD procedures, specific VOL. (ml) analytical methods, Collection NONE COLD RUSH Lab Sample Š observations, etc.) Matrix 로 Identification DATE TIME No. 92 MW-106 7/17/92 250 h 11 h 1000 ₽ h 11 G MW-10' h 1000 v TOTAL NUMBER OF CONTAINERS LABORATORY COMMENTS/ CONDITION OF SAMPLES RECEIVED BY: RELINQUISHED BY: DATE TIME SIGNATURE PRINTED NAME COMPANY COMPANY PRINTED NAME 17.00 Debby Skogen NET LABORATORY AO-aqueous NA-nonaqueous SO-soil SL-studge P-petroleum A-air OT-other Containers P-plastic G-glass T-tellon 8-brass OT-other

PINK: Field Copy YELLOW: Laboratory Copy WHITE: Return to Originator

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CHAIN-OF-CUSTODY RECORD AND REQUEST MCCULLEY, FRICK & GILMAN, INC.	FOR ANALYSIS NO.90-3135-5													
3300 Arapahoe Ave., Suite 218 Boulder, CO 80303 TEL: (303) 447-1823 FAX: (303) 447-1836  5818 Balcones Dr., Suite 202 Austin, TX 78731 TEL: (512) 371-1667 FAX: (512) 454-4126	5 Third St., Suite 916 San Francisco, CA 94103 TEL: (415) 495-7110 FAX: (415) 495-7107													
PROJECT No.: 90-3135  - PROJECT NAME! SAN MONCOS LAND # PAGE: 3 OF: 5  SAMPLER (Signature): DATE: 7-17-92  METHOD OF SHIPMENT: 12400 BJELINEY CARRIER/ WAYBILL NO. 1005 / MFG DESTINATION: MET / HUSTIN  SPECIAL INSTRUCTIONS/HAZARDS: CARRIER/ WAYBILL NO. 1005 / MFG DESTINATION: MET / HUSTIN  SAMPLES ANALYSIS REQUEST														
Preservation Containers* Methods Handling REMARKS														
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ningerie <del>Turk inderender der bester beter beter beter beter bester beter bete</del>	LABORATORY LABORATORY													
*KEY: Matrix AG-aqueous NA-nonaqueous SG-soil SL-skidge P-petroleum A-air OT-other Containers P-plastic G-glass T-sellon B-brass OT-other  PISTRIBUTION: PINK: Field Copy - YELLOW Laboratory Copy - White: Return to														

GF	OUNE	-WATER	SAM	PLIN	G RE	CORE	SA	MPLE NUM	IBER:	MW-101	0 1				
Pr	oject N	lumber:	90-31	35_	Pro	ject Na	ame: _	SAN MARC	S LAND	FILL Date: 7	17-92				
Sa	mpling	Location (v	vell ID,	etc.):	<u>M</u>	W-10	<u> </u>	Starting W	later Lev	rel (ft. BMP): _Z	1.04				
Sa	mpled	by:	rms/N	IFG				Casing Sti			g				
	-	g Point (MP			TOC	(PVC)	_			/el (ft. BGL):					
		d interval (fi				7-2		•			<u>835</u>				
		:k intervai (						Casing Vo		n ID):/	,45				
		ASSURANC		.):		20									
Mi	METHODS (describe): Rinse with tap, scrub with non-phosphate soap, rinse, repeat														
	Cleaning Equipment: Distilled water rinse; disposable teflon bailers used														
	Purging: Poly Bailer Sampling: Teflon bailer														
Di	Disposal of Discharged Water: Ground														
IN	INSTRUMENTS (Indicate make, model, i.d.): pH# 9003002 Cond. # 16076														
	Water Level: Olympic Well Probe #1 Aus Thermometer: Hg bulb/ATC Probe														
	pH Meter: Cole Parmer 5938-10 Field Calibration: 4, 7 & 10 pH Buffers														
		vity Meter:		_					ation: <u>4</u>	47 & 2070 µmh	<u>•</u>				
		.45µ high			sposa	bie	. (	Other:							
		G MEASURE	MENIS		/ater Qu	ality Data		Appea	rance						
Date/ Time	me Cumul.Vol. Purge Temp. pH Specific Conductance (passes/cm) Color Turbidity & REMARKS														
	(gal.) Rate (gpm) (C) PH GField Temp. @25 C Sediment														
1120	20 1.5 - 22.4 6.64 - 3000 Gray Cloudy for sol keed pra														
1125	3.0		21.9	6.79	_	_	2920	Logian	5) Clary	minus sd/	Sed				
1130	4.5	<u> </u>	21.9	6.78		-	2900	1 Gray	51i Clex	de Vmina	sakad				
										7	.,				
				- "											
		<del></del>													
							_	-							
Wat	er i evel (	ft. BMP) at End of	Durge:		·	25			ole intake De	pth (ft. 8MP): 24	5.5				
		NVENTORY						94m		7 (16 8m); <u> </u>					
		Bottles Collect	<u></u> ●d			<b>F</b> 114		Do a 2 **							
Time	Volume mi	Composition (gl		le) Qu	antity	Filtra (Y/		Preservation (type)	on	Remarks (quality control sample	e, other)				
1140	40	Glass			2	1	N	cold, no	ne	VOC's					
11	250	Amber	Glass		4		N	cold, H <sub>2</sub>	SO <sub>4</sub>	TOC					
11	1000	Plastic			1	•	Υ	cold, Hi	103	METALS					
1	1000	Plastic			1		N	cold, no	ne	GENERAL CHEN	MISTRY_				
	500	Plastic			1		N	Haso		NITRATE					
Cha	in-of-C	ustody Rec	ord No	. 90	-313	5-5				K & GILMAN,	INC				
ABBRE	VIATIONS	3:			de Diam	eter	'		-	Drive, Suite 202					
		esuring Point	•	C - Cel						exas 78731					
		und Level		•••		r minute	- 1	•	•	371-1667					
Cumul	. 4 01 - CUM	ulative Volume R	beverne	in inc	: n = 5				(312)	1001					

GF	ROUNE	O-WATER	SAM	PLIN	IG RE	COR	D ,	SAN	IPLE NUM	IBER: ,	Mw-	Page: 1 or 1			
P	roject i	Number:	90-31	35	Pro	ject N	lame: _	SA	N MARC	OS LAN	NDFILL	Date: 7/16/92			
Sa	ampling	Location (v	vell ID,	etc.):	Mu	J-10	12_	S	tarting W	later i	evel (ft	BMP): 15,68			
S	belgma	by:	TMS/N	1FG					asing Sti						
M	eagurir	ng Point (MP			TOC	(PVC)		S	tarting W	ater L	evel (ft.	BGL):			
		d interval (f						[	otal Depi	th (ft. E	3GL):	2"			
								1 -	asing Dia						
	QUALITY ASSURANCE														
М	METHODS (describe): Rinse with tap, scrub with non-phosphate soap, rinse, repeat														
C	Cleaning Equipment: Distilled water rinse; disposable tefion ballers used														
	Purging: Teflon bailer Sampling: Teflon bailer														
	Disposal of Discharged Water: Grand														
	INSTRUMENTS (Indicate make, model, i.d.): pH* 9003002 Cond. * 16076														
	Water Level: Olympic Well Probe #1 Aus Thermometer: Hg bulb/ATC Probe														
	pH Meter: Cole Parmer 5938-10 Field Calibration: 4, 7 & 10 pH Buffers														
	Conductivity Meter: YSI-SCI-33 Field Calibration: 447 & 2070 µmho  Filtration: .45µ high capacity disposable Other:														
		G MEASURE			ISDOSS	DIB									
Date/	Purge	Characteristics							Appea						
Time	Ime (gal.) Rate (gpm) (C) PH Specific Conductance (pmeas/on) Color Color Sediment REMARKS														
1242	Time   Color   Cadiment														
1252	4.2		23,5	6,71			2000	>	Clear	11	Odo	R. "			
1256	6.3		22.3				200	0	Clear	N		LI .			
			<del></del>	<del> </del> -											
				<u> </u>	<del>                                     </del>										
			<del> </del>	! 	+						<del></del>				
Wa	ter Level (	ft. BMP) at End o	f Purge:	<u> </u>	16				Sam	pie intake	Depth (ft. i	BMP): 10			
		NVENTORY													
		Bottles Collect				Filte	ation	Т	Preservation	<b>.</b> .		Remarks			
Time	Volume mi	Composition (gi	ass, plast	le) Q	uentity		/N)	1	(type)		(qualit	y control sample, other)			
130	40	Glass			2		<u>N</u>	_	cold, no	ne		VOC's			
	250	Amber	Glass		4		<u>N</u>	4	cold, H <sub>2</sub>	SO4		TOC			
$\bot$	1000	Plastic			_1		Υ		cold, Hi	103		METALS			
4	1000	Plastic			1		N	1	cold, no	ne	GENE	RAL CHEMISTRY			
74	500	Plastic			_1		N		H <sub>2</sub> SO,	1		NITRATE			
		Sustody Rec	ord No		)-313			M	cCULLE	Y, FR	ICK &	GILMAN, INC.			
	EVIATIONS			ID - ins C - Cel	ide Diam Iclus	eter				-		Suite 202			
		essuring Point ound Level		•	gallons gallon pe	e mienė.	}		1	Austin,	Texas	78731			
		ulative Volume R	emoved	gpm - in in	-					(512	2) 371-	1667			

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GF	ROUNE	-WATER	SAM	PLIN	IG RE	COR	D	SAN	IPLE NUM	BER: M	Page: 1 of 1 W-103				
	•	lumber: _ 9			A	ject N V- 10		SA	N MARCO	S LAND	FILL Date: 7/16/92				
		Location (w			<u>/ VI V</u>	V- 1C	/				rel (ft. BMP): <u>/8, 9/</u> ): _2, 3				
	-	g Point (MP			TOC	(PVC)		S	Starting W	ater Lev	rel (ft. BGL):				
		ig Politic (MP i interval (ft									L): <u>29.2-</u> n ID): <u>2"</u>				
		ck interval (							Casing Vol						
		ASSURANC					<del></del> -								
M	ETHOD	S (describe)	): Rins	e wit	h tap,	scrub	with	non-	phosphat	e soap, r	rinse, repeat				
	METHODS (describe): Rinse with tap, scrub with non-phosphate soap, rinse, repeat  Cleaning Equipment: Distilled water rinse; disposable teflon bailers used  Purging: Teflon bailer Sampling: Teflon bailer														
	Purging: Teflon bailer Sampling: Teflon bailer														
DI	Disposal of Discharged Water: Graund														
IN	INSTRUMENTS (Indicate make, model, i.d.): pH# 9003002 Cond. # 16076														
W	Water Level: Olympic Well Probe #1 Aus Thermometer: Hg bulb/ATC Probe														
pl	Water Level: Olympic Well Probe #1 Aus Thermometer: Hg bulb/ATC Probe pH Meter: Cole Parmer 5938-10 Field Calibration: 4, 7 & 10 pH Buffers														
C	onducti	vity Meter:	YSI	-sci-	33			Fie	eld Calibra	ation: <u>4</u>	47 & 2070 μmho				
FI	Conductivity Meter: YSI-SCI-33 Field Calibration: 447 & 2070 µmho  Filtration: .45µ high capacity disposable Other:														
SA	SAMPLING MEASUREMENTS														
Date/	Purge Characteristics Water Quality Data Appearance  Cumpit Vol.   Durge   Specific Conductance (constant)   Turbidity A DESEABLE														
Time	(gaL)		Temp.	pН	<del></del>	Temp.	@25		Color	Sediment	HEMIAHNS				
1345	2		45	6.48	+		250	0	tan	SP cloudy	orange floculate o.f. gone				
1350	14		23.5	6.48			25	<u>50</u>	whorless	clear	o.t. gone				
1355	16		23.5	6.60	) –		155	$\infty$							
				1	<u> </u>										
						·									
Wal	er Level (	ft. BMP) at End of	Purge: _	<u> </u>	13				Sam	ole intake De	pth (ft. BMP): <u>7</u>				
SA	MPLE I	NVENTORY				<del></del>					·				
Time	Volume	Bottles Collect		ic) O	uantity		ation '/N)		Preservation (type)	on	Remarks (quality control sample, other)				
140	40	_ Glass		.,	2		N		cold, no	ne	VOC's				
1	250	Amber	Glass		4		Ň		cold, H <sub>2</sub>		TOC				
T	1000	Plastic			1		Y		cold, HN		METALS				
I	1000	Plastic			1		N		cold, no		GENERAL CHEMISTRY				
$\overline{V}$	500	Plastic			1_		N_		H <sub>2</sub> SO <sub>2</sub>		NITRATE				
Cha	in-of-C	ustody Rec	ord No	. 90	-313	5-5		R.A			K & GILMAN, INC.				
ABBRI	EVIATIONS	):			ide Diam	eter		IAI		•					
BMP -	Below Me	esuring Point		C - Ce	icius Jailons						Drive, Suite 202				
BGL -	Below Gro	und Level		•	gailon pe	r minute			F	•	exas 78731				
Cumui	.Vol - Cum	R emuloV evitalu	emoved	in, - In	ches		- {			(512)	371-1667				

GR	OUNE	-WATER	SAM	PLIN	G RE	SAN	PLE NUN	BER: /	NW-	_	o: <u>1</u> of <u>1</u>			
Pr	oject N	Number:	90-31	35_	Pro	ject N	ame:	SA	N MARC	OS LANE	FILL	Date:	7/16/92	
Sa	mpling	Location (v	vell ID,	etc.):	MV	V-12	24	[ e	tarting W	later i e	val (ft 5	RAD).	20.28	
	mpled		ΓMS/M				<del></del>		asing Sti				~ ~ ~ ~	
	•	g Point (MP			TOC	(PVC)			tarting W					
		d Interval (fi							otal Deptasing Dia					
		ck interval (					.8		asing Vo				· · · · · · · · · · · · · · · · · · ·	
		ASSURANC												
M	METHODS (describe): Rinse with tap, scrub with non-phosphate soap, rinse, repeat													
CI	Cleaning Equipment: Distilled water rinse; disposable teflon bailers used													
	Purging: Teflon bailer Sampling: Teflon bailer													
Di	Disposal of Discharged Water: Ground													
	INSTRUMENTS (Indicate make, model, i.d.): pH* 9003002 Cond. * 16076													
	Water Level: Olympic Well Probe #1 Aus Thermometer: Hg bulb/ATC Probe													
•	pH Meter: Cole Parmer 5938-10 Field Calibration: 4, 7 & 10 pH Buffers													
	Conductivity Meter: YSI-SCI-33 Field Calibration: 447 & 2070 µmho													
	Filtration: .45µ high capacity disposable Other:													
Date/	SAMPLING MEASUREMENTS Purge Characteristics Water Quality Data Appearance													
Time	CumuLV (gai.)		Temp.	рН		Conduct	925 C	Color			RKS			
7/16				105	401-1010	· Vilipi	1030		60	0.0-	1.10			
ll abo	149-	<del></del>	22.5		<b>-</b>		103	2-	Claur	//	b V.SI	Cle	pady	
1/16 1005 7/16	5.0		22.3	-			100		Clear	Clear		11 Cle	vdy	
1010	7.8	3 -	22.5	4.00			la	2	Clean	Cllar	10 .	. •		
											<u> </u>			
						_		İ						
Wat	er Level (	ft. BMP) at End o	Purge:			20.1	8		Samp	ole intake De	pth (ft. 8M	P): <b>25</b>	OBMP	
SA	MPLE I	NVENTORY	:											
	16-1	Bottles Collect		^			ation		Preservatio	on T		Remarks		
Time	Volume mi	Composition (gi	ess, plasti	(c) Qu	antity	(4,	/N)		(type)	<del></del> -	(quality e	ontrol sa	mple, other)	
1020	40_	Glass			2		N	-	cold, noi	ne		/0C's		
1020	250	Amber	Glass		4		<u>N</u>		cold, H <sub>2</sub>	so <sub>4</sub>		ГОС		
1020	1000	Plastic	<u>.</u>		1		Υ	-	cold, HN	103	8	<b>METAL</b>	s	
1020	1000	Plastic			1_		<u> </u>	+-	cold, no				EMISTRY	
	500	Plastic			1		N		H <sub>2</sub> SO <sub>4</sub>		N	ITRATI	<u> </u>	
		ustody Rec	ord No		-313			M	CCULLE	Y, FRIC	<b>K &amp; G</b>	ILMAI	N, INC.	
	VIATIONS			ID - Insi C - Celo	de Diam :ius	eter			58.18 B	alcones	Drive, S	uite 20	02	
		esuring Point and Level		gal g			32 °		Д	ustin, T	exas 7	8731		
		iulative Volume R	emoved	gpm - g		r minute				(512)	371-16	67		

GF	ROUND-WATER SAMPLING RECORD SAMPLE NUMBER: MW-105												
	-	Number:			Mai	Ject Na W-10	12			FILL Date: 7-16-92			
	. •	by:			نب	<u> </u>	j.s			rel (ft. BMP): <u>21.88</u> ):			
	-	g Point (MP			TOC	(PVC)	\$	itarting W	ater Lev	rel (ft. BGL):			
		d Interval (f		١.	b - 2			•		L): 26.8			
		ck interval (				26.	<i>—</i>	Casing Dia Casing Voi		1 7 7			
		ASSURANC		<u>'</u>		0.01.							
				e wit	h tap.	scrub	with non-	nhosnhat	e soan	rinse, repeat			
		Equipment:							• •	· · ·			
		Teflon b			<u> </u>			mpling:					
	•	of Discharg					wellsite						
	INSTRUMENTS (indicate make, model, i.d.): pH* 9003002 Cond. * 16076												
	Water Level: Olympic Well Probe *1 Aus Thermometer: Hg bulb/ATC Probe												
pH Meter: Cole Parmer 5938-10 Field Calibration: 4, 7 & 10 pH Buffers  Conductivity Meter: YSI-SCI-33 Field Calibration: 447 \$ 2070 umbs													
Conductivity Meter: YSI-SCI-33 Field Calibration: 447 & 2070 µmho Filtration: 45µ high capacity disposable Other:													
	SAMPLING MEASUREMENTS												
Date/	Date/ Purge Characteristics Water Quality Data Appearance												
Time	CumuLV (gal.)		Temp.	pН		Temp.	P25C	Color	Turbidity & Sediment	REMARKS			
1110	1.25		22.8	6.68			7500	Htan	turbid				
117	2.5		<del>  -                                   </del>	6.74	<del>}</del>		7500	l (	IJ	sulfirons faor			
1124	3.5	-	21.3	6.69			<del>7500</del>	Ji	1)	11			
			1 1										
Wa	ter Lovel (	ft. BMP) at End o	f Purge:	22	5			Samp	ole intake De	pth (ft. BMP): <u>26</u>			
		ft. BMP) at End o		22	5			Sam	ole intake De	pth (ft. 8MP): <u>26</u>			
SA	MPLE	NVENTORY  Bottles Collect	ted			Filtra		Preservatio		Remarks			
SA	MPLE I	NVENTORY  Bottles Collect  Composition (gi	ted		antity	<b>(Y</b> /I	N)	Preservatio (type)	n	Remarks (quality control sample, other)			
S.A.	Volume ml	NVENTORY Bottles Collect Composition (gi	ted ass, plasti		entity	(Y/I	N)	Preservation (type)	500. 500.	Remarks (quality control sample, other)			
S.A.	Volume ml 40	NVENTORY Bottles Collect Composition (gi Glass Amber	ted ass, plasti		antity 2 4	(Y/) 	N) V	Preservation (type)  cold, most	SO 4	Remarks (quality control sample, other)  VOC'S  TOC			
SA	Velume ml 40 250 1000	NVENTORY  Bottles Collect  Composition (gi  Glass  Amber  Plastic	ted ass, plasti		2 4	(Y/) 1	N)	cold, Ho	SO 4	Remarks (quality control sample, other)  VOC'S  TOC  METALS			
S.A.	Volume ml 40 250 1000	NVENTORY Bottles Collect Composition (gi Glass Amber Plastic Plastic	ted ass, plasti		antity 2 4	(Y/)	N)	cold, Ho	SO <sub>4</sub>	Remarks (quality control sample, other)  VOC'S  TOC  METALS  GENERAL CHEMISTRY			
SA Time	Volume ml 40 250 1000 1000 500	NVENTORY  Bottles Collect  Composition (gi  Glass  Amber  Plastic	ded lass, plastic Glass	e) Qu	2 4 1	1 1 1	N)	cold, Hocold, no	SO 4	Remarks (quality control sample, other)  VOC'S  TOC  METALS  GENERAL CHEMISTRY  NITRATE			
Time	Volume ml 40 250 1000 1000 500	Bottles Collect Composition (gi Glass Amber Plastic Plastic Plastic custody Rec	ded lass, plastic Glass	e) Qu	2 4 1 1 1-313	(Y/)    1	N)	cold, Hocold, no	504 103 ne	Remarks (quality control sample, other)  VOC'S  TOC  METALS  GENERAL CHEMISTRY  NITRATE  CK & GILMAN, INC.			
SA Time 1127 Cha ABBR BMP	Volume ml 40 250 1000 500 in-of-C	NVENTORY Bottles Collect Composition (gi Glass Amber Plastic Plastic Plastic Custody Rec	ded lass, plastic Glass	c) Qu	2 4 1 1 -313 ide Diam	(Y/)    1	N)	cold, Hocold, no H <sub>2</sub> SO <sub>A</sub>	SO <sub>4</sub> IO <sub>3</sub> ne Y, FRIC	Remarks (quality control sample, other)  VOC'S  TOC  METALS  GENERAL CHEMISTRY  NITRATE  CK & GILMAN, INC.  Drive, Suite 202			
Time 1127 Cha ABBR BMP- BGL-	Volume ml 40 250 1000 500 lin-of-C	NVENTORY Bottles Collect Composition (gi Glass Amber Plastic Plastic Plastic Custody Rec	Glass	. 90 ID - Insi	2 4 1 1 -313 ide Diam cius allons gallon pe	(Y/)  N 5-5	N)	cold, Hocold, no H <sub>2</sub> SO <sub>A</sub>	SO 4 10 3 ne Y, FRIC	Remarks (quality control sample, other)  VOC'S  TOC  METALS  GENERAL CHEMISTRY  NITRATE  CK & GILMAN, INC.			

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GF	ROUNE	O-WATER	SAM	PLIN	G RE	CORE	s	AMPLE N	JMBER:	MW-	Page: 1 of 1			
Pı	oject i	Number:	90-31	35	Pro	ject Na	ame: _	SAN MAR	COS LA	NDFILL	Date: 7/17/92			
Sa	mpling	Location (v	veil ID,	etc.):	MV	V-100	0_	Starting	Water	Level (ft.	BMP): 22.3			
Sa	belqma	by:	TMS/N	IFG				Casing	Stickup	(ft.):2	2.0			
M	easurir	ng Point (MP	) of W	eli: _	TOC	(PVC)	· ·	Starting Total De	Water of the contract of the c	Level (ft. BGL):	BGL): 33,06			
S	reene	d interval (f	BGL)	:				Casing	lamete	r (in ID):	2"			
Fi	iter Pa	ck interval (	ft. BGL	.):				Casing '	/olume	(gal.):	7			
QI	JALITY	ASSURANC	Ε					<del>-</del>						
M	ETHOD	S (describe	): Rins	e wit	n tap,	scrub	with no	n-phospi	ate soa	p, rinse,	repeat			
CI	eaning	Equipment:	Dist	illed v	/ater	rinse; c	disposa	ble teflor	bailers	used				
	ırging:							Sampling		lon bailer	,			
	-	of Discharg			9		ينطنى	<b>Grow</b>						
	INSTRUMENTS (Indicate make, model, i.d.): pH# 9003002 Cond. # 16076  Water Level: Olympic Well Probe #1 Aug. Thermometer: Hg bulb /ATC Probe													
	Water Level: Olympic Well Probe *1 Aus Thermometer: Hg bulb/ATC Probe													
-	pH Meter: Cole Parmer 5938-10 Field Calibration: 4, 7 & 10 pH Buffers  Conductivity Meter: YSI-SCI-33 Field Calibration: 447 & 2070 umbo													
	Conductivity Meter: YSI-SCI-33 Field Calibration: 447 & 2070 µmho  Filtration: .45µ high capacity disposable Other:													
SA	MPLIN	G MEASURE	MENTS	<u>city ui</u> S	<u>spose</u>	IDIO	<del></del>		<del></del>	<del></del>				
Date/	Purge	Characteristics				allty Data			pearance					
Time	Cumul.V		Temp.	pН	<del> </del>	Temp.	@25C	26 C		ty &	REMARKS			
1000	2		23.0	300			990	60 00						
1008 1015	4	-	22.3			_	990		11					
1020	6		22.2			_	1000	1	v Ele	~~	· · · · · · · · · · · · · · · · · · ·			
<u>10ω</u>	! <u>-7</u> 		<u> </u>	0112			7000	Leel		7,				
				<u></u>						1 1	1. Jan			
	<u></u> _						-		-	1 - 1	note Vaca			
	·										1-106 7-17.92			
14/-1	ea Laval (	ft. BMP) at End of			ي کي	<del>-</del>					1530 IMP): 30,25			
		NVENTORY	rurge:			<u></u>			Emple intal	ke Depth (ft. B	MP7:			
	1411 P.E. 1	Bottles Collect	•d			Flitra	<u> </u>	Preserv						
Tim⊕	Volume mi	Composition (gi	ass, plast	ic) Qu	antitý	(Y/		(type		(quality	Remarks y control sample, other)			
1030	40	Glass			2		٧	cold,	none		VOC's			
<u> </u>	250	Amber	Glass		4	1	V	cold,	H <sub>2</sub> SO <sub>4</sub>		TOC			
<b>(</b> (	1000	Plastic			1	`	Υ .	cold,	HNO <sub>3</sub>		METALS			
<b>l</b> e .	1000	Plastic			1		V	cold.	none	GENE	RAL CHEMISTRY			
q	500	Plastic			1		V	Has			NITRATE			
Cha	in-of-C	ustody Rec	ord No	. 90	-313	5-5		McCIII I	EY F	RICK &	GILMAN, INC.			
ABBRE	EVIATIONS	: 		ID - Insi C - Cel	de Diam	eter .			•		Suite 202			
		esuring Point		gal g				3310		, Texas				
		ound Level ouistive Volume R	emoved	gpm - (	•	r minute				2) 371-1				

GI	ROUNE	D-WATER	SAM	PLIN	G RE	COR	D ,	SAN	IPLE NUM	BER: /	1W-	Page: 1 of 1
		Number:				ject N	lame:	SA	N MARCO	S LAN	DFILL	Date: 7/16/92
S	ampling	Location (v	veli ID,	etc.):	MW	<u> </u>	7	s	tarting W	ater Le	vel (ft.	BMP): 20.17
s	belqma	by:	TMS/N	IFG				C	asing Sti	kup (f	i.): <u>2</u>	,4
M	easurir	ng Point (MP	) of W	ell: _	TOC	(PVC)			tarting W			
		d interval (f		1	ラー	29			otal Dept asing Dia			2"
		ck interval (			- 8,	29		•	asing Vo			9
		ASSURANC									<del></del>	
	ETHOD	S (describe	): Rins	e wit	h tap,	scrub	with n	on-	phosphat	e soap.	rinse, r	epeat
		Equipment:				•			•		•	
		Teflon b					чен		mpling:		n bailer	
	•	of Discharg	•		_				Gronn	<u> </u>		
11	INSTRUMENTS (Indicate make, model, l.d.): pH* 9003002 Cond. * 16076											
	Water Level: Olympic Well Probe *1 Aus Thermometer: Hg bulb/ATC Probe											
•	pH Meter: Cole Parmer 5938-10 Fleid Calibration: 4, 7 & 10 pH Buffers											
	Conductivity Meter: YSI-SCI-33 Field Calibration: 447 & 2070 µmho  Filtration: 45µ high capacity disposable Other:											
	iltration: .45µ high capacity disposable Other:											
Date/	Purge	Characteristics			Vater Qu				Appea			
Time	CumuLV (gal.)		Temp.	рH	<del></del>	Temp.	e25 C		Color	Turbidity ( Sediment		REMARKS
439	12		23,4	71	-		827	7		soldy	<del>                                     </del>	
1445	4		22.1	7.16			7//		CLLAN	n D	<del>-</del> -	
	┾╼╃╤╌		12 5				17/1	$\leftarrow$		<del></del>		
17)	6		22.5	<u> </u>			700	_	11	1)		
	<del> </del>	_									ļ	<del></del>
	ļ				<del> </del> -		<u> </u>					
	<u>.</u>	·   · · ·			ļ							
		ft. BMP) at End o		2	1				Samı	ie intske [	Depth (ft. B	MP): <u>15</u>
SA	MPLE	NVENTORY			<del> </del>			<del></del>				
Time	Volume	Bottles Collect		ie) Qi	antity		ation /N)	ļ	Preservation (type)	n	(quailty	Remarks control sample, other)
1500	40	Glass			2		N	+	cold, no	ne		VOC's
7	250	Amber	Glass		4		N		cold, Ho			TOC
	1000	Plastic			1		Y		cold, HN			METALS
1	1000	Plastic			1		N		cold, no		CENE	RAL CHEMISTRY
1	500	Plastic		T)	1		N_	$\top$	HaSO			NITRATE
Cha		ustody Rec	ord No	. 90	-313			N.A				
ABBR	EVIATIONS	3:			ide Diam	eter		IVI		•		GILMAN, INC.
BMP	Below Me	esuring Point		C - Cel							rorive, : Texas	Suite 202
		ound Level		gpm -	gzilon pe	r minute			^	•	371-1	
Cumu	LVel - Cun	rulative Volume R	emoved	in, - in	enee					(512)		

Proje Weat Meas	ct No.: ther Co suring P	91-313  Inditions: _	Tympic W	et Name: City	of San Mil		
DATE or WELL	TIME	MP ELEVATION (1001, NGVD)	DEPTH TO WATER (feet below MP)	CONVERSIONS of CORRECTIONS (foot)	WATER LEVEL ELEVATION (feet, NGVD)	REMARKS	MEASURED BY
fW-101	0800	576,33	21.04		555.29		The
W-10Z	0807	569.37	15.68		553.69		
W-103	0807	573.19	18.91	\	554.28		
W-104	0813	575.06	20.28	\.	554.78	/	
HW-105	١.	576.56	21.88		554.68	26	
	I	580.50	22.3		558.20	TD= 35.00	
	0825		20,17	\ .	556,30		
						· ·	
Pond	1530		STAFF Una	la Water -	40 - fren	_ bank	
			nuable f	Access	+ meas		
							V
·						<u> </u>	
						<del></del>	
·	-	<del> </del>				<del>                                     </del>	<del> </del>
<del></del>	-	<del> </del>			<del> </del>		<del> </del>
		<del> </del>	<del> </del>			· · · · · · · · · · · · · · · · · · ·	
		<u> </u>			<del> </del>		
		1	<del> </del>				<u> </u>
	<del> </del>	<del> </del>	<del> </del>	<del> </del>		<del></del>	<del> </del>
Meas Chec	ured by	r: <u>1. 1</u>	M Scan DRF	len	58181	y, Frick & Gi Balcones Dr., Si stin, Texas 78	uite 202

The second of th

GF	ROUND	-WATER	SAM	PLIN	G RE	CORD	SA	MPLE NUM	(BER:	) (6)	Page: 1 of 1 Well		
Pr	oject N	lumber:	0-31	35_	Pro	iect Nar	ne: _S	AN MARC	OS LAND	FILL	Date: 7-17-92		
Sa	mpling	Location (v	vell ID,	etc.):	(b) (b)	Wel	Lr	Starting W	/ater Le	vel (ft. E	BMP):		
Sa	mpled	by:1	MS/N	IFG			_	Casing Sti	ckup (ft	.):	1.6" AGL		
M	easurin	g Point (MP	of W	ell: _	TOC	(PVC)	_	Total Dep	th (ft. BC	iL):	3GL): <u>18./3 B</u> MP		
		i Interval (fi									4-Di		
		k interval (		<u>.):</u>				Casing Vo	lume (ga	al.):			
QL	JALITY	ASSURANC	E										
		3 (describe)						-		-	epeat		
		Equipment:		illed v	vater	rinse; di							
		Teflon b					\$	ampling:	<u>Teflor</u>	baller			
	Disposal of Discharged Water:  INSTRUMENTS (Indicate make, model, i.d.): pH# 9003002 Cond # 16076												
	INSTRUMENTS (Indicate make, model, i.d.): pH* 9003002 Cond. * 16076  Water Level: Olympic Well Probe #1 Aus Thermometer: Hg bulb / ATC Probe												
	Water Level: Olympic Well Probe #1 Aus Thermometer: Hg bulb/ATC Probe												
	pH Meter: Cole Parmer 5938-10 Field Calibration: 4, 7 & 10 pH Buffers												
	Conductivity Meter: YSI-SCI-33 Field Calibration: 447 & 2070 µmho  Filtration: 45µ high capacity disposable Other:												
		MEASURE			30036	1010							
Date/	Purge C	haracteristics				ality Data			rance				
Time	Cumul.Vo	Rate (gpm)	Temp.	рH			@25C	Color Turbidity & REMARKS			REMARKS		
1725	-		21.4	7.		_	500	V Life Velley	Clar	Ray	15 10		
1223		<del>                                     </del>	0(7)	<i>'-</i>	-	<del>-  </del>	<del></del>	Tint	Cura	Dall	Zample (m		
<del></del>		<del></del>							-	14	In Saiter		
	<u> </u>	<del></del>	<u> </u>	<del> </del>						VIVa	11 / 1		
					<u> </u>					4.	ft diameter		
	ļ									WL	11 - Not		
		<del></del>	· .						·	in	use.		
					<u> </u>				<u> </u>				
		t. BMP) at End of	Purge:				= :-	Sem	ple intake D	epth (ft. BN	MP):		
SA	MPLE II	VENTORY	<del>. :</del>										
Time	Volume mi	Bottles Collect Composition (gir		ic) Qu	antity	Filtratio (Y/N)		Preservati (type)	on	(quality	Remarks control sample, other)		
1230	40	Glass			2	N		cold, no	ne		VQC's		
			01										
									-				
1720	1000	Diachic			4					051	AL OUT HOTOY		
الايد	30 1000 Plastic 1 N cold, none GENERAL CHEMISTRY												
Chai	n-of-C	ustody Rec	ord No	. 90	-313	5-5	T.	1.00	· · ·				
	VIATIONS:				ide Diam		-  I		-		ILMAN, INC.		
		esuring Point		C - Cet	cius		1			•	Suite 202		
BGL -	Below Gro	und Level			anous Sellou be	r minute		•	Austin, T				
Cumul	.Vol - Cumi	ulative Volume R	emoved	in in	ches				(512)	371-10	567		

GF	GROUND-WATER SAMPLING RECORD SAMPLE NUMBER: TX. Breedis Service  Project Number: 90-3135 Project Name: SAN MARCOS LANDFILL Date: 7-17-92													
Pı	roject î	lumber:9	90-31	35	Pro	lect N	ame:	SA	N MARCO	S LAND	FILL_	Date: 7	-17-92	
Sa	mpling	Location (v	vell ID,	etc.	(D) (D)		TXBS					BMP): _/2		
Sa	mpled	by:	TMS/M	1FG					_			51VIF); <u>12</u>		
		g Point (MP			TOC	(PVC)		s	tarting W	ater Le	vel (ft. E			
								T	otal Dept	h (ft. BG	iL):		29-	
		d Interval (fi				<del></del>			asing Dia			toel) /. (		
		ASSURANC			10					iume (ga				
									attle					
		S (describe)										ереат		
		Equipment:		- //						ailers us	ed	C 501	- I	
Purging: Solgot Disposal of Discharged Water: Sampling: Grown d														
	INSTRUMENTS (Indicate make, model, i.e.): pH* 9003002 Cond. * 16076													
INSTRUMENTS (Indicate make, model, i.e.): pH* 9003002 Cond. * 16076  Water Level: Olympic Well Probe *1 Aus Thermometer: Hg bulb/ATC Probe														
рł	Water Level: Olympic Well Probe *1 Aus Thermometer: Hg bulb/ATC Probe pH Meter: Cole Parmer 5938-10 Field Calibration: 4, 7 & 10 pH Buffers													
		vity Meter:						Fle	eld Calibra	ation: _4	47 & 2	070 µmh	0	
		: .45µ high			ispos	able		Ot	her:					
		G MEASURE	MENTS	<u> </u>	Water Q	allty Date			Appea	rance			<del></del>   .	
Date/ Time	CumuLV	ol. Purge	Temp.	рН	Specifi	e Conduct	ance (pm/		Color	Turbidity & Sediment	1	REMARKS	s	
<u>.</u>	(gal.)	Rate (gpm)	(0)	- 3	<del></del>	d Temp.	925 C		- 1	11	-	. /		
1300	1		22	7,0	<u> </u>		117	5	Clear	(law	Sam	gshe fro	me .	
											501	got co h	HILADO	
<u> </u>					,						beh	ind how	usl.	
									_		1,1911	Pauce	don	
											+ 0	11 =	4 held	,
											Cia	10415		,
					1						H.	) October	to Somo	Ĺ
Wat	ter Level (	ft. BMP) at End of	Purge:						Samı	ole intake D			70 2010	<u>"</u>
SA	MPLE I	NVENTORY												9
		Bottles Collect	•d			Filtre	ation	$\top$	Preservation	on		Remarks		
Time	Volume mi	Composition (gl	ass, plasti	le) (	Quantity	. (Y	/N)	$\perp$	(type)		(quality	control sample	e, other)	
1305	40	Glass			2		N		cold, no	ne		VOC's		
							N		CONTRACT					
								工						
1300	1000	Plastic			1		N		oold no	70	GENE	RAL CHEM	NSTRV	
223	1000	Flastic						$\pm$	cold, no	пө	GENE	TAL CHEN	ISTAT	
Cha	in-of-C	ustody Rec	ord No	. 9	0-313	5-5			-01111	V 551	W 0 0	NI LIALI	INC	
	EVIATIONS			iD - in	side Diam			M		-		SILMAN,	1	
BMP -	Below Me	esuring Point			elcius gailons					alcones \ustin, T	-	Suite 202 78731		
		und Level		gpm ·	gallon pe	r minute			,		371-1			
Cumul	. v et - Cum	ulative Volume R	emoved	in 1	nches					(312)	J, 1-11		1	

GF	OUNE	D-WATE	RSAM	PLIN	G RE	COR			BKLLING IPLE NUM		o) (6)	ige: 1 of 1		
Pr	oject i	Number:	90-31	35_	b) (6)			ŠΑ	N MARCO	S LAND	FILL_ Dat	e: <u>7-17-9</u> 2		
Sa	mpling	Location (	well ID,	etc.)				_						
Sa	belamı	by:	TMS/N	(FG				C	carting w casing Sti	ckup (ft	vel (ft. BMP .):	): <u>(.85</u> 2.85		
		ng Point (Mi			TOC	(PVC)		S	tarting W	ater Le	vel (ft. BGL)	:		
		d interval (							otal Dept	th (ft. BC	iL): In ID): <i>(BRY)</i>	20.9		
		ck Interval									ıl.):			
		ASSURANC			cor	Dev	IlHIN							
									_//	- KAR	rinse, repe	**		
									•	* -	-			
	Purging: Sampling: Sampling: Spigot													
_	Disposal of Discharged Water: Ground													
	INSTRUMENTS (indicate make, model, i.d.): pH* 9003002 Cond. * 16076													
1	Water Level: Olympic Well Probe *1 Aus Thermometer: Hg bulb/ATC Probe													
		r: <u>Cole Pa</u>									, 7 & 10 pH			
		ivity Meter							eld Calibra her:	ation:4	47 & 2070	umho		
		: .45µ hig G MEASURI			sposa	IDIO		-	ner:	<del></del>				
Date/	Purge	Characteristics			Vater Qu				Appea		<u> </u>			
Time	Cumul.V		Temp.	рН		Conduc Temp.	#25 C	ces)	Color	Turbidity & Sediment	REN	MARKS		
1325	_		23.5	6.85	<del></del>		1130	,	Clari	00-	1.1.11	•		
110	<u> </u>		120.0	0,00			112		Clear	Cleve	1			
			-					-			vhomin	You 5 m		
	<u> </u>		<del> </del>	<u> </u>							Drive	& Sempla		
			ļ <u>.</u>								'	- 0		
			<del> </del>											
			<u> </u>											
							ļ							
Wat	er Level (	ft, BMP) et End	of Purge:					_	Semj	pie intake D	epth (ft. BMP):			
SA	MPLE	NVENTOR		:										
<b>-</b> 1_	Volume	Bottles Collec					ation		Preservatio	n -	Rema			
Time	mi	Composition (g	jiass, plast	10) 0	antity		/N)	$\vdash$	(type)		(quality contro	ol sample, other)		
1340	40	Glass			2		N	$\vdash$	cold, no	ne	Voc	2's		
·	-						<u> </u>	-						
	-										111-4			
1340	1000	Plastic			1		N		cold, no	ne	GENERAL	CHEMISTRY		
	9													
Chai	n-of-C	ustody Re	cord No	. 90	-313	5-5		M	cCUL I F	Y FRIC	CK & GILM	IAN INC		
ABBRE	POITAIV	3:		ID - Ins	ide Diam	eter				•	Drive, Suite	1		
		asuring Point		gal g	ations						exas 787			
		ound Level ruistive Volume	Removed	gpm - in.	gallon pe ches	r minute				-	371-1667	,		

GF	Project Number: 90-3135 Project Name: SAN MARCOS LANDFILL Date: 7/17/97													
Pt	oject i	Number:	90-31	35	Pro	iect Na	me: S	AN MARC	OS LANI	FILL Date: 7/17/97				
	-	Location (v			$(\mathbf{D})$									
	. •	by:	•					Casing Sti	ckup (fi					
M	easurin	ng Point (MP	) of W	ell:	TOC	(PVC)		-		vel (ft. BGL):				
		d Interval (f		_				Total Dep		in ID)(Gnacle) 3.0				
		ck interval (								al.):				
QL	JALITY	ASSURANC	E W	119	usal	dex	Dr	MKINO	1 In	ragation				
M	ETHOD	S (describe								rinse, repeat				
CI	eaning	Equipment:						le tefion b	ailers us	sed				
_ Pt	ırging:			$B_{\perp}$	<u>w</u>		s	ampling:		Splgot				
	-	of Discharg						Grown						
	INSTRUMENTS (Indicate make, model, l.d.): pH* 9003002 Cond. * 16076  Water Level: Olympic Well Probe *1 Aus Thermometer: Hg bulb / ATC Probe													
	Water Level: Olympic Well Probe #1 Aus Thermometer: Hg bulb/ATC Probe													
	pH Meter: Cole Parmer 5938-10 Field Calibration: 4, 7 & 10 pH Buffers													
	Conductivity Meter: YSI-SCI-33 Field Calibration: 447 & 2070 µmho													
	Filtration: .45µ high capacity disposable Other: SAMPLING MEASUREMENTS													
Date/		Characteristics	MENT		Vater Qu	ailty Data		Appea	rance	<u> </u>				
Time	Cumul.V		Temp.	рн			TCO (pmnas/en	Color	Turbidity 8	DEMIADIO				
1-1	(gai.)	Hate (Shus)		7.0	-	Temp.	@25 C	-						
<u> 1345</u>			23.3	7.12			1500	Clear	Clean	slow well 5 mm				
										Drive to Sumply				
										Livel uce in Am				
										La VINCH CIVIGA -				
										10 WASH / 1 VALLED				
								<del>                                     </del>						
Wat	er Level (	It. BMP) at End o	Purge:					Sam	pie intake D	epth (ft. BMP):				
		NVENTORY				-								
		Bottles Collect	•d			Filtrat	lon	Preservation		Remarks				
Time	Volume mi	Composition (gi	ass, plast	le) Qu	entity	(Y/N		(type)		(quality control sample, other)				
1350	40	Glass			2	N		cold, no	ne	VOC's				
	-													
	4000													
1340	1000	Plastic			1	N		cold, no	ne	GENERAL CHEMISTRY				
Cha	n-of-C	ustody Rec	ord No	. 90	-313	5-5		ACCULLE	V EDI	CK & GILMAN, INC.				
ABBRE	VIATIONS	i:			ide Diam	eter			•	Drive, Suite 202				
		asuring Point		C - Cei			1			exas 78731				
		und Level			gellon pe	r minute		•	_	371-1667				
cumul	voi - Cum	uistive Volume R	emoved	in, - ind	ne s				(0 12/	· · · · · · · · · · · · · · · · · · ·				

GF	OUNI	O-WATER	SAM	PLIN	G RE	CORD	SA	MPLE NUM	BER:	Page: 1 of 1  PECAN GROUP				
Pr	oject l	Number:	90-31	35	(B)(6			AN MARC	OS LANL	Date: 7-17-92				
Sa	mpilng	Location (v	veil ID,	etc.):		Grove		Starting V	ater Le	vel (ft. BMP):				
Sa	mpled	by:	TMS/N	IFG				Casing Sti	ckup (ft	.):				
		ng Point (MP					-	Total Dep	th (ft. BC					
		d interval (f								in ID):(conacte) 2.5-				
		ck Interval (		<u>.):</u>				Casing Vo	lume (ga	il.):				
		ASSURANC												
								-		rinse, repeat				
	Cleaning Equipment: Distilled water rinse; disposable teflon bailers used  Purging: Sampling: Sampling: Solo of													
	Purging: Flow / 15cm   Sampling: Splant													
	INSTRUMENTS (indicate make, model, i.d.): pH* 9003002 Cond. * 16076													
		evel: Olym								g bulb/ATC Probe				
		r: Cole Pa							_	, 7 & 10 pH Buffers				
		vity Meter:			_					47 & 2070 µmho				
		.45µ higi				ble		ther:						
	MPLIN	G MEASURE		3	_									
Date/ Time	Cumul.V	Characteristics oL Purge	Temp.			allty Data Conductance	• (pm/los/cm)	<del></del>	Turbidity &	REMARKS				
· ime	(gal.)	Rate (gpm)	(c)	рН	@Field	Temp. 6	25 C		Sediment					
14p			23.7	7.12	_	_   -	700	Clau	Clocu	No Electric Herrer				
			ļ							to pump/punce				
							· .			Well - somple				
										with Teller				
										Benley				
		<u>.  </u>					·	<u> </u>						
							,							
Wat	er Level (	ft. BMP) at End o	f Purge:					Sam	ple intake D	epth (ft. BMP):				
SA	MPLE	NVENTORY												
Time	Volume	Bottles Collect		(a) Ta		Flitration (Y/N)	n	Preservati	n	Remarks (quality control sample, other)				
	ml	Composition (gi	ass, plast	ie) Qu	antity	(17.10)		(type)		(quality control sample, other)				
145	40_	Glass			2	N.		cold, no	ne	VOC's				
	-													
1415	1000	Plastic			1	N		cold, no	ne	GENERAL CHEMISTRY				
							45			;				
		ustody Rec	ord No		-313		-  N	<b>AcCULLE</b>	Y, FRIC	CK & GILMAN, INC.				
	VIATIONS Below Me	i: esuring Point		ID - Insi	de Diam cius	<b>⊕10</b> ∫		5818 B	alcones	Drive, Suite 202				
		ound Level		gai g apm - s		r minute			Austin, T	exas 78731				
Cumul.	Vol - Cum	uistive Volume R	temoved	in inc					(512)	371-1667				

GF	ROUNE	-WATER	SAM	PLIN	G RE	CORD	SA	MPLE NUM	(b) (6	5)	Page: 1 of 1 Residence			
Pr	oject i	Number:	90-313	35_	(b) (6)	Na	me: _ <u>\$</u>	AN MARC	S LAND	FILL C	ate: 7-17-92			
Sa	mpling	Location (v	veli ID,	etc.):	_6	esclen	ود	Starting W	later I ev	ol (# P#	MP): /5.05			
Sa	mpled	by:	TMS/M	FG				Casing Sti						
	-	g Point (MP			TOC	SIFE	رچي ا	Starting W			GL):			
		d interval (fi					9	Total Dept Casing Dia			(d) 3.0-			
		ck interval (					_	Casing Vo		-				
		ASSURANC			n∈√	Irra	a coste							
M	ETHOD	S (describe)					-3		e soap.	rinse, re	peat			
		Equipment:							• •					
											Spigot			
DI	Disposal of Discharged Water: Ground													
	INSTRUMENTS (indicate make, model, i.d.): pH# 9003002 Cond. # 16076  Water Level: Olympic Well Probe #1 Aus Thermometer: Hg bulb / ATC Probe													
	Water Level: Olympic Well Probe *1 Aus Thermometer: Hg bulb/ATC Probe pH Meter: Cole Parmer 5938-10 Field Calibration: 4.7 & 10 pH Buffers													
*	pH Meter: Cole Parmer 5938-10 Field Calibration: 4, 7 & 10 pH Buffers													
	Conductivity Meter: YSI-SCI-33 Field Calibration: 447 & 2070 µmho													
	Filtration: .45µ high capacity disposable Other: SAMPLING MEASUREMENTS													
Date/	Purge	Characteristics		W		allty Data		Appes			·			
Time	Cumul.V		Temp.	pН		Conducter Temp.	@25 C	Color	Turbidity & Sediment	R	EMARKS			
1,12			22.5	7:13			700	Mari	Clari	-	00 7			
1435			حمله	7117			700	(bav	(Year		well Fring			
	<u> </u>							<del> </del>		Dejor	to Sumply			
· 	<u> </u>							<u> </u>		well	used in At			
		<u> </u>												
Wat	er Level (	ft. BMP) at End of	Purge:					Same	pie intake De	pth (ft. BMP	):			
SA	MPLE	NVENTORY	:											
	Volume	Bottles Collect				Fütrati (Y/N		Preservation	a		emarks			
Time	mi	Composition (gi	ass, plastic	;) Qu	antity	(17N	-	(type)		(draitty co	ntrol sample, other)			
1440	40	Glass			2	N		cold, no	ne		OC's			
										· · ·				
140	1000	Plastic			1	N		cold, no	пе	GENER	AL CHEMISTRY			
Cha	In-of-C	ustody Rec	ord No.	. 90	-313	5-5		McCUI I F	Y FRIC	K & GII	LMAN, INC.			
ABBRE	VIATIONS	3:		ID - Inel C - Cel	de Diam	eter	] '		aicones		- I			
		ssuring Point		gal - g	silons		-		Lustin, T	-				
		iund Level iulative Volume R	emoved	gpm - ( in, - inc		r minute			-	371-16	1			

GF	ROUNE	-WATER	SAM	PLIN	G RE	CORD	SA	(Zesid MPLE NUI	MBER:	) (6)	Page: 1 of 1			
Pi	oject N	lumber:	90-31	35_	Pro	ject Na	me: S	AN MARC	OS LAN	DFILL_	Date: 4-14-92			
Sa	mpling	Location (v	veli ID,	etc.):	(a) (e	))		Starting \	Vater L	evel (ft.	BMP): <u>/4.95</u>			
Sa	belqma	by:	MS/M	FG				Casing St						
М	easurin	g Point (MP	) of We	ell:	TOC	(PVC)		Starting \ Total Dep						
S	creene	d interval (fi	. BGL):					Casing Di	ameter	(in ID):				
Fi	iter Pac	ck interval (	ft. BGL	):				Casing V	olume (g	jai.):				
Q	JALITY	ASSURANC	EI	RRIE	SAT	200	USE							
M	ETHOD	S (describe)	: Rins	e witi	ı tap,	scrub v	with no	n-phospha	te soap	, rinse, r	epeat			
		Equipment:						le teflon l	ailers u	sed				
							\$	Sampling:	n		Sprant			
	-	of Discharg						Grou						
	INSTRUMENTS (Indicate make, model, i.d.): pH* 9003002 Cond. * 16076  Water Level: Olympic Well Probe *1 Aus Thermometer: Hg bulb/ATC Probe													
	pH Meter: Cole Parmer 5938-10 Field Calibration: 4, 7 & 10 pH Buffers  Conductivity Meter: YSI-SCI-33 Field Calibration: 447 & 2070 µmho													
	Filtration: _45µ high capacity disposable Other:													
	MPLIN	G MEASURE		3										
Date/ Time	Cumul.V	Cheracteristics  L. Purge	Temp.			c Conducts	INCO (penes/cr		Turbidity	4	REMARKS			
* Im •	(gal.)	Rate (gpm)	(c)	pH	@Flet	Temp.	@25 C	Color		t				
1455	<b> </b>	_	22.7	7.02		<u> </u>	800	Class	Clar	Fla	w 5 min prior			
											Samuele -			
·										(b) (6)	hos			
										baa	A COMMIN well			
										dun	in day.			
							·				/			
Wat	er Level (	(t. BMP) at End of	Purge:					Sar	npie intake	Depth (ft. B	MP);			
SA	MPLE	NVENTORY												
		Bottles Collect	•d			Filtra		Preservat	ion		Remarks			
Time	Valume mi	Composition (gir	ass, plasti	e) Qu	entity	(Y/I	N)	(type)		(quality	control sample, other)			
<u>1500</u>	40	Glass			2			cold, ne	enc		VOC's			
1500	1000	Plastic			1		1	cold, n	one	GENE	RAL CHEMISTRY			
	-500-							فارندد						
Cha	in-of-C	ustody Rec	ord No	. 90	-313	5-5		McCULI	Y FR	ICK & C	GILMAN, INC.			
	EVIATIONS			ID - Inei C - Cele	de Diam	eter	] '		-		Suite 202			
	Below Me Below Gro	asuring Point		gal g	alions	• :	1			Texas				
	_	ulative Volume R	emoved	gpm - g		r minute			(512	371-1	667			
											<del></del>			



August 26, 1992

Municipal Solid Waste Division Texas Water Commission P.O.Box 13087 Austin, Texas 78711

Attn: Aida Lichaa

Re: Solid Waste - Permit No. 640 Ground-Water Monitoring

City of San Marcos

Transmitted herewith are results from the third calendar quarter (1992) ground-water monitoring at the City of San Marcos Landfill. Ground-water samples were collected from site monitoring wells on July 16-17, 1992 by McCulley, Frick and Gilman, Inc. (MFG) personnel. Background samples were obtained from monitoring well MW-106. Group 1 parameters were not analyzed in the MW-106 sample; a second sampling trip will be conducted this month to obtain a sample from MW-106 for analysis of Group 1 parameters. Samples for analysis of volatile organic compounds and Group 2,3 and 4 parameters were collected from all seven monitoring wells. Samples from the seven off-site private wells were analyzed for VOCs, pH, specific conductance, total dissolved solids and chloride. The private wells are believed to be the same wells sampled by the Corp of Engineers on August 29, 1990. MFG collected split samples from all fourteen wells for the Texas Water Commission (TWC).

In addition to the completed Groundwater Monitoring Reports for wells MW-101 through MW-107, copies of the NET laboratory reports for these wells and the off-site private wells, chain of custody forms and the field sampling data sheets for all monitoring and off-site wells are enclosed.

The following observations regarding this monitoring event are noted:

- water level elevations in the site monitoring wells on July 16, 1992 were 5 to 9 feet higher than levels measured on September 30, 1991.
- monitoring well MW-106, which was installed on April 20, 1990, contained water for the first time.
- the apparent ground-water flow direction (based on the July 16, 1992 data) is toward the southeast.

August 26, 1992 Municipal Solid Waste Division Texas Water Commission Page 2

> volatile organic compounds were detected in only two of the seven site monitoring wells - MW-102 (chlorobenzene of 9.4 ug/L) and MW-103 (cis-1,2-DCE of 24 ug/L and vinyl chloride of 27 ug/L).

cation-anion balance errors exceeded 5 percent in sample from two of the seven monitoring wells - MW-105 and MW-106. Laboratory re-analysis of major ion concentrations did not materially alter the calculated errors.

- no volatile organic compounds were detected in the water sample from the seven off-site wells, six of which are located generally downgradient of the landfill (the (b)(6) well is upgradient).

Sincerely,

Stephen M. Jenkins, P.E., Director

Environment and Engineering Department

SMJ/as

Enclosure

cc: Mark Vickery (w/o enclosure)

# GROUN WATER MONITORING I PORT

# TDH Permit No. <u>640</u> Monitor Well I.D. No. <u>MW 101</u> City of San Marcos Landfill

Date Sampled	l: <u>7/17/92</u> No. of Quarts C	ollected: 3 liters	_ Sampled by:	Tim Scanlon	
Representing:	Site Operator Const	ultant <u>x</u> Lab	oratory Person	nel _	
Well Purged/	Bailed Before Sampling: You	es x No F	low Long Befo	re: Immediately	
, ,	umes Purged: 3 Depth t		_	-	
	-		_	IL DICY <u>JSJ.ES</u> MISE	
How Were Sa	mples Collected : _Deconta	aminated Tellon	Bailer		
Were sample	preservation procedures in	accordance with	TDH Guidelin	es: Yes x No _	
GROUP	PARAMETER	LEVEL	UNITS	ANALYSIS METHOD EPA 600/4-79-020 Rev. 19	83
1	Arsenic				
•	Barium				
	Cadmium				
	Chromium	NOT A	ANALYZED		
	Copper				
	Lead				
	Mercury				
	Selenium	•			
	Silver	<del>-</del>			
	Zinc	<del></del>	<del></del>		
2	Calcium	340.	mg/L	215.1	
4	Magnesium	50.	mg/L	242.1	
	Sodium	330.	mg/L	273.1	
	Potassium	26.	mg/L	258.1	
	Carbonate	<1.	mg/L	403 Std. Methods	
	Bicarbonate (CaCO <sub>3</sub> )	356.	mg/L	403 Std. Methods	
	Sulphate	350.	mg/L	375.4	
	Fluoride	0.4	mg/L	340.2	
	Nitrate (N)	1.13	mg/L	353.3	
	Phenolphthalein		-		
	Alkalinity (CaCO <sub>3</sub> )	<1.	mg/L	310.1	
	Alkalinity (CaCO <sub>3</sub> )Total		mg/L	310.1	
	Hardness (CaCO <sub>3</sub> )	976.	mg/L % Error	130.2	
<del></del>	Anion-Cation Balance	3.62	% EHOI		
3	Chloride	680.	mg/L	325.3	
-	pH	6.7	units	150.1	
	Specific Conductance	3,140.	umhos	120.1	
	Total Dissolved Solids	2,060.	mg/L	160.1	
	Total Organic Carbon	5.	mg/L	415.1	
	Total Organic Carbon	4.	mg/L	415.1	
	Total Organic Carbon	3.	mg/L	415.1	
<del></del>	Total Organic Carbon	5.	mg/L	415.1	
4	Iron	0.12	mg/L	236.1	
<del></del>	Manganese	0.19	mg/L	243,1	
Laboratory P.	epresentative Signature:	See attached re	nort	Phone(512) 928-8905	
	•				
Laboratory N	ame: <u>NET (Gulf Coast), I</u>	nc. Addre	ess: <u>2621-130</u>	Ridgepoint Dr., Austin, Tx 78	5/54
Site Operator	Signature:	Making	Dat	e: <u>08/26/92</u>	(SE65)

#### GROUNDWATER MONITORING R. PORT

# TDH Permit No. 640 Monitor Well I.D. No. MW 102 City of San Marcos Landfill

Purpose of:	Groups 1, 2, 3, & 4	x Semi-anni Groups 3 &	ual/Annual Dat 2 4	a _ Fourth Year Groups 2, 3,	
Date Samples	i: <u>7/16/92</u> No. of Quarts C	ollected: 3 liters	_ Sampled by:	Tim Scanlon	
Representing:	Site Operator Cons	ultant <u>x</u> Lab	oratory Personn	nel _	
	Bailed Before Sampling: Y		•	_	
<del>-</del> .	umes Purged: 3 Depth t		_		
	• . –			IL Elea <u>333:03</u> M2E	
How Were Sa	amples Collected: <u>Deconta</u>	aminated Tellon	Bailer_		
Were sample	preservation procedures in	accordance with	TDH Guideline	es: Yes <u>x</u> No	
GROUP	PARAMETER	LEVEL	UNITS	ANALYSIS METI EPA 600/4-79-020 Re	
1	Arsenic		• .	·	
1	Barium				
	Cadmium			•	•
	Chromium				
	Copper	NOT	ANALYZED		
	Lead	1101 2	ANALIZED		
	Mercury				
	Selenium				
	Silver	<del>.</del>			
	Zinc				
2	Calcium	180.	mg/L	215.1	
	Magnesium	29.	mg/L	242.1	
	Sodium	260.	mg/L	273.1	
	Potassium	40.	mg/L	258.1	
	Carbonate	<1.	mg/l	403 Std. Methods	
	Bicarbonate (CaCO <sub>3</sub> )	860.	mg/l	403 Std. Methods	
	Sulphate	.63.	mg/L	375.4	
	Fluoride	0.5	mg/L	340.2	
	Nitrate (N)	0.61	mg/L	353.3	
	Phenolphthalein Alkalinity (CaCO <sub>3</sub> )	<1.	/1	310.1	•
	Alkalinity (CaCO <sub>3</sub> )Total		mg/l mg/L	310.1	
	Hardness (CaCO <sub>3</sub> )	504.	mg/L mg/L	130.2	
	Anion-Cation Balance		% Error		•
	,	-			
3	Chloride	220.	mg/L	325.3	
	рН	6.4	units	150.1	
	Specific Conductance	2,160.	umhos/cm	120.1	
	Total Dissolved Solids	1,290.	mg/L	160.1	
	Total Organic Carbon	33.	mg/L	415.1	
	Total Organic Carbon	34.	mg/L	415.1	
•	Total Organic Carbon	33. 35.	mg/L	415.1	
4	Total Organic Carbon Iron	33.	mg/L	415.1	
7	Manganese		mg/L mg/L	236.1 243.1	
	ungunoso			243.1	
Laboratory R	epresentative Signature:	See attached re	port Phon	ie <u>(512) 928-8905</u>	
Laboratory N			-	gepoint Dr., Austin, TX	78754
Site Operator	///	M. lenkini	Date		(SE65)
•		· <del></del>			

# GROUN. WATER MONITORING R PORT

# TDH Permit No. <u>640</u> Monitor Well I.D. No. <u>MW 103</u> City of San Marcos Landfill

Submittal for Purpose of:	Background Data Groups 1, 2, 3, & 4	x Semi-ann Groups 3 &	ual/Annual Dai 24	Fourth Year Da Groups 2, 3, &	
Date Sampled	l: 7/16/92 No. of Quarts C	ollected: 3 liters	_ Sampled by:	Tim Scanlon	
Representing:	Site Operator Cons	ultant x Lab	oratory Person	nel _	
-	Bailed Before Sampling: Y				
	umes Purged: _3 Depth t		-	IT Elev <u>554.28</u> MSL	
How Were Sa	amples Collected: <u>Decont</u>	aminated Tellon	Bailer		
Were sample	preservation procedures in	accordance with	TDH Guidelin	es: Yes <u>x</u> No	
GROUP	PARAMETER	LEVEL	UNITS	ANALYSIS METHO EPA 600/4-79-020 Rev. 1	
1	Arsenic				
•	Barium				
	Cadmium				
	Chromium	NOT A	NALYZED		
	Copper				
	Lead				
	Mercury				
	Selenium	•			
	Silver	÷			
	Zinc				
2	Calcium	270.	mg/L	215.1	
_	Magnesium	37.	mg/L	242.1	
	Sodium	290.	mg/L	273.1	
	Potassium	24.	mg/L	258.1	
	Carbonate	<1.	mg/L	403 Std. Methods	
	Bicarbonate (CaCO <sub>3</sub> )	620.	mg/L	403 Std. Methods	
	Sulphate	250.	mg/L	375.4	
	Fluoride	0.4	mg/L	340.2	
	Nitrate (N)	0.20	mg/L	353.3	
	Phenolphthalein		/-	****	
	Alkalinity (CaCO <sub>3</sub> )	<1.	mg/L	310.1	
	Alkalinity (CaCO <sub>3</sub> )Total		mg/L	310.1	
	Hardness (CaCO <sub>3</sub> ) Anion-Cation Balance	832. 1.08	mg/L %_Error	130.2	
	Timon Cation Bulance		70 E1101		
3	Chloride	454.	mg/L	325.3	
	pН	6.3	units	150.1	
	Specific Conductance	2,670.	umhos/cm	120.1	
	Total Dissolved Solids	1,730	mg/L	160.1	
	Total Organic Carbon	16.	mg/L	415.1	
	Total Organic Carbon	16.	mg/L	415.1	
	Total Organic Carbon	15. 17.	mg/L	415.1	
4	Total Organic Carbon Iron	3.3	mg/L mg/L	415.1 236.1	
	Manganese	7.8	mg/L mg/L	243.1	
Laboratory R	epresentative Signature:	See attached re	port	Phone(512) 928-8905	<u> </u>
Laboratory N	ame: NET (Gulf Coast), I	nc. / Addre	ess: <u>2621-130 l</u>	Ridgepoint Dr., Austin, Tx	78754
Site Operator	Signature:	Jehn:	Date	e: 08/26/92	_ (SE6
	0 7/0 -			, ,	

# GROUN WATER MONITORING & PORT

# TDH Permit No. <u>640</u> Monitor Well I.D. No. <u>MW 104</u> City of San Marcos Landfill

Purpose of:	Groups 1, 2, 3, & 4	Groups 3 &	<b>2</b> 4	Groups 2, 3, & 4
ate Sampled	l: <u>7/16/92</u> No. of Quarts C	Collected: 3 liters	_ Sampled by:	Tim Scanlon
presenting:	Site Operator Cons	ultant <u>x</u> Lab	oratory Person	nel _
ell Purged/	Bailed Before Sampling: Y	'es <u>x</u> No <u> </u>	How Long Befo	re: Immediately
Well Vol	umes Purged: 3 Depth	to Water Refore	Bailing: 20.28	ft Flev 554 78 MSI.
	imples Collected: Decont			11 5.01 <u>55 170</u> 1102
	-			
ere sample	preservation procedures in	accordance with	TDH Guidelin	es: Yes x No
GROUP	PARAMETER	LEVEL	UNITS	ANALYSIS METHOD EPA 600/4-79-020 Rev. 1983
1	Arsenic			
-	Barium			
	Cadmium			
	Chromium	NOT A	NALYZED	
	Copper	.101 //		
	Lead			
	Mercury	:		-
	Selenium	•		
	Silver	<u>-</u>		
	Zinc		<del></del>	<del></del>
2	Calcium	134.	mg/L	215.1
-	Magnesium	11.	mg/L	242.1
	Sodium	120.	mg/L	273.1
	Potassium	3.5	mg/L	258.1
	Carbonate	<1.	mg/L	403 Std. Methods
	Bicarbonate (CaCO <sub>3</sub> )	380.	mg/L	403 Std. Methods
	Sulphate	140.	mg/L	375.4
	Fluoride	0.4	mg/L	340.2
	Nitrate (N)	3.59	mg/L	353.3
	Phenolphthalein		Si .	-
	Alkalinity (CaCO <sub>3</sub> )	<1.	mg/L	310.1
	Alkalinity (CaCO <sub>3</sub> )Total	d 380.	mg/L	310.1
	Hardness (CaCO <sub>3</sub> )	344.	mg/L	130.2
	Anion-Cation Balance	1.63	% Error	
3	Chloride	70.	mg/L	325.3
-	pH	6.8	units	150.1
	Specific Conductance	1,130.	umhos/cm	120.1
	Total Dissolved Solids	738.	mg/L	160.1
	Total Organic Carbon	1.	mg/L	415.1
	Total Organic Carbon	1.	mg/L	415.1
	Total Organic Carbon	1.	mg/L	415.1
	Total Organic Carbon	1,	mg/L	415.1
4	Iron	0.08	mg/L	236.1
	Manganese	< 0.01	mg/L	243.1
. L		S		ni (5/4) 000 0005
•	epresentative Signature:			Phone (512) 928-8905
boratory N	ame: <u>NET (Gulf Coast)</u>	Inc. Addre	ess: <u>2621-130 l</u>	Ridgepoint Dr., Austin, Tx 7875
ta Operator	Signature:	M. 1/2 1. 1	Date	e: <u>08/26/92</u> (S

# GROUN WATER MONITORING REPORT

# TDH Permit No. <u>640</u> Monitor Well I.D. No. <u>MW 105</u> City of San Marcos Landfill

ubmittal for _ Purpose of:	Background Data Groups 1, 2, 3, & 4	x Semi-ann Groups 3	ual/Annual Data & 4	Fourth Year Data Groups 2, 3, & 4
Date Sampled:	: 7/16/92 No. of Quarts C	ollected: 3 liters	Sampled by:	Tim Scanlon
-	Site Operator Const			
	• —	<del>-</del>	•	_
Vell Purged/I	Bailed Before Sampling: Y	es <u>x</u> No	How Long Befor	e: Immediately
lo. Well Volu	mes Purged: 3 Depth t	o Water Before	Bailing: <u>21.88</u> f	ft Elev <u>554.68</u> MSL
Iow Were Sa	mples Collected: <u>Deconta</u>	aminated Teflor	Bailer	
Vere sample p	preservation procedures in	accordance with	TDH Guideline	es: Yes <u>x</u> No <u> </u>
GROUP	PARAMETER	LEVEL	UNITS	ANALYSIS METHOD EPA 600/4-79-020 Rev. 1983
1	Arsenic			
1	Barium			
	Cadmium			
	Chromium			
	Copper	NOT	ANALYZED	
	Lead			
	Mercury			
	Selenium			
	Silver			•
	Zinc	<del>-</del>	·	
_				
2	Calcium	143.	mg/L	215.1
	Magnesium	8.	mg/L	242.1
	Sodium	70.	mg/L	273.1
	Potassium Carbonate	2.9	mg/L	258.1 403 Std. Methods
	Bicarbonate (CaCO <sub>3</sub> )	<1. 344.	mg/L mg/L	403 Std. Methods
	Sulphate (Caco <sub>3</sub> )	46.	mg/L	375.4
	Fluoride	0.5	mg/L	340.2
	Nitrate (N)	0.51	mg/L	353.3
	Phenolphthalein		6/	505.5
•	Alkalinity (CaCO <sub>3</sub> )	<1.	mg/L	310.1
	Alkalinity (CaCO <sub>3</sub> )Total		mg/L	310.1
	Hardness (CaCO <sub>3</sub> )	392.	mg/L	130.2
<del></del>	Anion-Cation Balance	8.26	% Error	
2	Chlavida	50	/I	225.2
3	Chloride pH	50. 6.6	mg/L units	325.3 150.1
	Specific Conductance	837.	units umhos/cm	120.1
	Total Dissolved Solids	547.	mg/L	160.1
	Total Organic Carbon	3.	mg/L	415.1
	Total Organic Carbon	3.	mg/L	415.1
	Total Organic Carbon	2.	mg/L	415.1
	Total Organic Carbon	2,	mg/L	415.1
4	Iron	0.05	mg/L	236.1
	Manganese	0.11	mg/L	243.1
aboratory Re	presentative Signature:	See attached re	eport	Phone (512) 928-8905
aboratory Na	nme: <u>NET (Gulf Coast), I</u>	nc/ Addr	ess: <u>2621-130 R</u>	Ridgepoint Dr., Austin, Tx 78754
ite Operator		Il Jehing		:: <u>08/46/92</u> (SE

#### GROUN WATER MONITORING & PORT

# TDH Permit No. <u>640</u> Monitor Well I.D. No. <u>MW 106</u> City of San Marcos Landfill

Submittal for Purpose of:	x Background Data Groups 1, 2, 3, & 4	Semi-ann Groups 3 &	ual/Annual Da & 4	ta _ Fourth Year D Groups 2, 3, &	
Date Sampled	l: 7/17/92 No. of Quarts C	Collected: 3 liters	Sampled by:	Tim Scanlon	
-	Site Operator Cons				
	Bailed Before Sampling: Y		<del>-</del>	_	
No. Well Vol	umes Purged: 3 Depth	to Water Before	Bailing: <u>22.30</u>	ft Elev <u>558.20</u> MSL	
How Were Sa	imples Collected: <u>Decont</u>	aminated Teflon	Bailer		
Were sample	preservation procedures in	accordance with	TDH Guidelin	es: Yes x No _	
GROUP	PARAMETER	LEVEL	UNITS	ANALYSIS METHO EPA 600/4-79-020 Rev.	
1	Arsenic			•	
•	Barium				
	Cadmium				
	Chromium	NOT	ANALYZED	•	
	Copper				
	Lead				
	Mercury	•			
	Selenium	•			
	Silver	÷.			
	Zinc				<u>.</u>
•	Calcium	. 120		215.1	
2	Magnesium	130. 15.	mg/L mg/L	215.1 242.1	
	Sodium	12.	mg/L mg/L	273.1	
	Potassium	24.	mg/L mg/L	258.1	
	Carbonate	< 1.	mg/L	403 Std. Methods.	
	Bicarbonate (CaCO <sub>3</sub> )	324.	mg/L	403 Std. Methods.	
	Sulphate	130.	mg/L	375.4	
	Fluoride	0.4	mg/L	340.2	
	Nitrate (N)	13.9	mg/L	353.3	
	Phenolphthalein				
	Alkalinity (CaCO <sub>3</sub> )	<1.	mg/L	310.1	
	Alkalinity (CaCO <sub>3</sub> )Total		mg/L	310.1	
	Hardness (CaCO <sub>3</sub> )	344.	mg/L	130.2	
	Anion-Cation Balance	7.58	% Error		
3	Chloride	40.	mg/L	325.3	
J	pH	7.1	units	150.1	
	Specific Conductance	1,050.	umhos/cm	120.1	
	Total Dissolved Solids	706.	mg/L	160.1	
	Total Organic Carbon	1.	mg/L	415.1	
	Total Organic Carbon	1.	mg/L	415.1	
	Total Organic Carbon	1.	mg/L	415.1	
	Total Organic Carbon	1.	mg/L	415.1	···
4	Iron	0.12	mg/L	236.1	-
	Manganese	0.01	mg/L	243.1	
Laboratory P.	epresentative Signature:	See attached re	nort	Phone(512) 928-8905	5
-	•				
Laboratory N	ame: <u>NET (Gulf Coast), I</u>	nc. Addre	ss: <u>2621-130 I</u>	Ridgepoint Dr., Austin, Tx	<u> 78754 </u>
Site Operator	Signature: Ttilled	1. feet	Date	: 01/26/92	_ (SE65

#### GROUN. WATER MONITORING R PORT

# TDH Permit No. <u>640</u> Monitor Well I.D. No. <u>MW 107</u> City of San Marcos Landfill

Submittal for Purpose of:	Background Data Groups 1, 2, 3, & 4	x Semi-anı Groups 3	ual/Annual Da & 4	Fourth Year Data Groups 2, 3, & 4	
Date Sampled	: 7/16/92 No. of Quarts C	ollected: 3 liter:	Sampled by:	Tim Scanlon	
Representing:	Site Operator Cons	ultant <u>x</u> La	boratory Person	nel _	
Well Purged/	Bailed Before Sampling: Y	es x No	How Long Befo	re: Immediately	
•			_	•	
	umes Purged: 3 Depth			II Elev <u>330.30</u> M2L	
How were Sa	mples Collected: <u>Decont</u>	aminated Lettor	n Bailer		
Were sample	preservation procedures in	accordance with	TDH Guidelin	es: Yes <u>x</u> No	
GROUP	PARAMETER	LEVEL	UNITS	ANALYSIS METHOD EPA 600/4-79-020 Rev. 198	
1	Arsenic .				
• .	Barium	•			
	Cadmium				
	Chromium				
	Copper	NOT	ANALYZED		
	Lead				
	Mercury	•			
	Selenium	•			
	Silver	<u>.</u>			
·	Zinc				
2	Calcium	100.	mg/L	215.1	
	Magnesium	9.	mg/L	242.1	
	Sodium	70.	mg/L	273.1	
	Potassium	22.	mg/L	258.1	
	Carbonate	<1.	mg/L	403 Std. Methods.	
	Bicarbonate (CaCO <sub>3</sub> )	282.	mg/L	403 Std. Methods.	
	Sulphate Fluoride	110.	mg/L	375.4	
		0.4	mg/L	340.2	
	Nitrate (N) Phenolphthalein	9.6	mg/L	353.3	
	Alkalinity (CaCO <sub>3</sub> )	<1.	ma/I	310.1	
	Alkalinity (CaCO <sub>3</sub> ) Total		mg/L	310.1	
	Hardness (CaCO <sub>3</sub> )	272.	mg/L mg/L	130.2	
	Anion-Cation Balance	3.44	% Error	150.2	
			/**********************************		
<b>3</b> ·	Chloride	28.	mg/L	325.3	
	pН	7.0	units	150.1	
	Specific Conductance	795.	umhos/cm	120.1	
•	Total Dissolved Solids	495.	mg/L	160.1	
	Total Organic Carbon	1.	mg/L	415.1	
	Total Organic Carbon	1.	mg/L	415.1	
•	Total Organic Carbon	1.	mg/L	415.1	
<del></del>	Total Organic Carbon	1.	mg/L	415.1	
4	Iron	0.10	mg/L	236.1	
	Manganese	0.02	mg/L	243.1	
Laboratory Re	epresentative Signature:	See attached r	eport	Phone(512) 928-8905	
_	•				754
Laboratory N	ame: <u>NET (Gulf Coast), l</u>	Addr		Ridgepoint Dr., Austin, Tx 78	
Site Operator	Signature: Teste	MUS	Date	e: 08/26/92	(SE65

Tel: (512) 928-8905 Fax: (512) 928-3208

#### **ANALYTICAL REPORT**

Doug Frick McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO: 81122

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION: MW-101

Date Taken: 07/17/1992

Date Received: 07/17/1992

Alkalinity, bicarb (CACO3) Alkalinity, carbonate (CACO Alkalinity, phenol (CACO3) Alkalinity, total (CACO3) Anion/Cation Balance Chloride Fluoride Hardness, Total N-Nitrate N-Nitrate N-Nitrite pH Solids, Total Dissolved Specific Conductance Sulfate, Turbidimetric Total Organic Carbon (W) a	356. <1. <1. 356. 3.62 680. 0.4 976. 1.13 1.12 0.01 6.7 ^ 2,060. 3,140. 350.	mg/L mg/L mg/L % Error mg/L mg/L mg/L mg/L mg/L mg/L units mg/L unhos/cm mg/L mg/L
N-Nitrite	0.01	
pН	6.7 ^	units
Solids, Total Dissolved	2,060.	mg/L
Specific Conductance	3,140.	umhos/cm
Sulfate, Turbidimetric		mg/L
Total Organic Carbon (W) a	5.	mg/L.
Total Organic Carbon (W) b	4.	mg/L
Total Organic Carbon (W) c	3.	mg/L
Total Organic Carbon (W) d	5.	mg/L
Calcium, AA	340.	mg/L
Iron, AA	0.12	mg/L
Magnesium, AA	50.	mg/L
Manganese, AA	0.19	mg/L
Potassium, AA	26.	mg/L
Sodium, AA	330.	mg/L
· · · · · · · · · · · · · ·		3.

<sup>^</sup> Sample analyzed beyond holding time for parameter.







Tel: (512) 928-8905 Fax: (512) 928-3208

#### **ANALYTICAL REPORT**

Doug Frick

MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO:

81122

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

Date Taken: 07/17/1992

MW-101

Date Received: 07/17/1992

AOTALITES	_	8240	AQUEOUS
	<1	L00.	

Acetone	<100.	ug/L
Acrolein	<10.0	ug/L
Acrylonitrile	<10.0	ug/L
Benzene	<5.0	ug/L
Bromodichloromethane	<5.0	ug/L
Bromoform	<5.0	ug/L
Bromomethane	<10.0	ug/L
2-Butanone	<100.	ug/L
Carbon disulfide	<5.0	ug/L
Carbon tetrachloride	<5.0	ug/L
Chlorobenzene	<5.0	ug/L
Chloroethane	<10.0	ug/L
2-Chloroethylvinyl ether	<10.0	ug/L
Chloroform	<5.0	ug/L
Chloromethane	<10.0	ug/L
Dibromochloromethane	<5.0	ug/L
1,1-Dichloroethane	<5.0	ug/L
1,2-Dichloroethane	<5.0	ug/L
1,1-Dichloroethene	<5.0	ug/L
cis-1,2-Dichloroethene	<5.0	ug/L
trans-1,2-Dichloroethene	<b>&lt;5.0</b>	ug/L
1,2-Dichloropropane	<5.0	ug/L
cis-1,3-Dichloropropene	<5.0	ug/L
trans-1,3-Dichloropropene	<5.0	ug/L
Ethylbenzene	<5.0	ug/L
2-Hexanone	<50.0	ug/L
Methylene chloride	<5.0	ug/L
4-Methyl-2-pentanone	<50 <b>.</b>	ug/L
Styrene	<5.0	ug/L
		<del>-</del>

Austin Division





Tel: (512) 928-8905 Fax: (512) 928-3208

#### **ANALYTICAL REPORT**

Doug Frick

McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

07/31/1992

JOB NO:

92.1731

SAMPLE NO: 81122

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION:

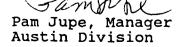
MW-101

Date Taken: 07/17/1992

Date Received: 07/17

07/17/1992

1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene Trichlorofluoromethane Vinyl acetate	- 8240 AQUEOUS <5.0 <5.0 <5.0 <5.0 <5.0 <5.0 <5.0 <5.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L
	- · ·	







Tel: (512) 928-8905 Fax: (512) 928-3208

#### **ANALYTICAL REPORT**

Doug Frick McCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

08/17/1992

JOB NO:

92.1729

mg/L mg/L mg/L

SAMPLE NO:

81063

90-3135-5

San Marcos Landfill

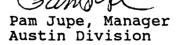
SAMPLE DESCRIPTION: MW-102

Date Taken: 07/16/1992

Date Received: 07/17/1992

Alkalinity, bicarb (CACO3)	860.
Alkalinity, carbonate (CACO	<1.
Alkalinity, phenol (CACO3)	
Alkalinity, total (CACO3)	860.
Anion/Cation Balance	2.08
Chloride	220.
Fluoride	0.5
Hardness, Total	504.
N-Nitrate	0.61
pH	6.4
	1,290.
	2,160.
Sulfate, Turbidimetric	63.
Total Organic Carbon (W) a	33.
Total Organic Carbon (W) b	
Total Organic Carbon (W) c	
Total Organic Carbon (W) d	35.
Calcium, AA	180.
Iron, AA	3.1
Magnesium, AA	29.
Manganese, AA	1.3
Potassium, AA	40.
Sodium, AA	260.

mg/L % Error mg/L mg/L mg/L mg/L units mg/L umhos/cm mg/L mg/L mg/L mg/L. mg/L mg/L mg/L mg/L mg/L mg/L mg/L







Tel: (512) 928-8905 -Fax: (512) 928-3208

#### ANALYTICAL REPORT

Doug Frick McCULLEY, FRICK & GILMAN, INC. 5818 Balcones Drive

Suite 202

Austin, TX 78731

08/17/1992

JOB NO:

92.1729

SAMPLE NO:

81063

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION: MW-102

Date Taken: 07/16/1992 Date Received: 07/17/1992

### VOLATILES - 8240 AQUEOUS <100.

Acetone	<100.	ug/L
Acrolein	<10.0	ug/L
Acrylonitrile	<10.0	ug/L
Benzene	<5.0	ug/L
Bromodichloromethane	<5.0	ug/L
Bromoform	<5.0	ug/L
Bromomethane	<10.0	ug/L
2-Butanone	<100.	ug/L
Carbon disulfide	<5.0	ug/L
Carbon tetrachloride	<5.0	ug/L
Chlorobenzene	9.4	ug/L
Chloroethane	<10.0	ug/L
2-Chloroethylvinyl ether	<10.0	ug/L
Chloroform	<5.0	ug/L
Chloromethane	<10.0	ug/L
Dibromochloromethane	<5.0	ug/L.
1,1-Dichloroethane	<5.0	ug/L
1,2-Dichloroethane	<5.0	ug/L
1,1-Dichloroethene	<5.0	ug/L
cis-1,2-Dichloroethene	<5.0	ug/L
trans-1,2-Dichloroethene	<5.0	ug/L
1,2-Dichloropropane	<5.0	ug/L
cis-1,3-Dichloropropene	<5.0	ug/L
trans-1,3-Dichloropropene	<5.0	ug/L
Ethylbenzene	<5.0	ug/L
2-Hexanone	<50.0	ug/L
Methylene chloride	<5.0	ug/L
4-Methyl-2-pentanone	<50.	ug/L
Styrene	<5.0	ug/L







Tel: (512) 928-8905 Fax: (512) 928-3208

#### ANALYTICAL REPORT

Doug Frick

MCCULLEY, FRICK & GILMAN, INC.

5818 Balcones Drive

Suite 202

Austin, TX 78731

08/17/1992

JOB NO:

92.1729

SAMPLE NO:

81063

90-3135-5

San Marcos Landfill

SAMPLE DESCRIPTION: MW-102

Date Taken: 07/16/1992

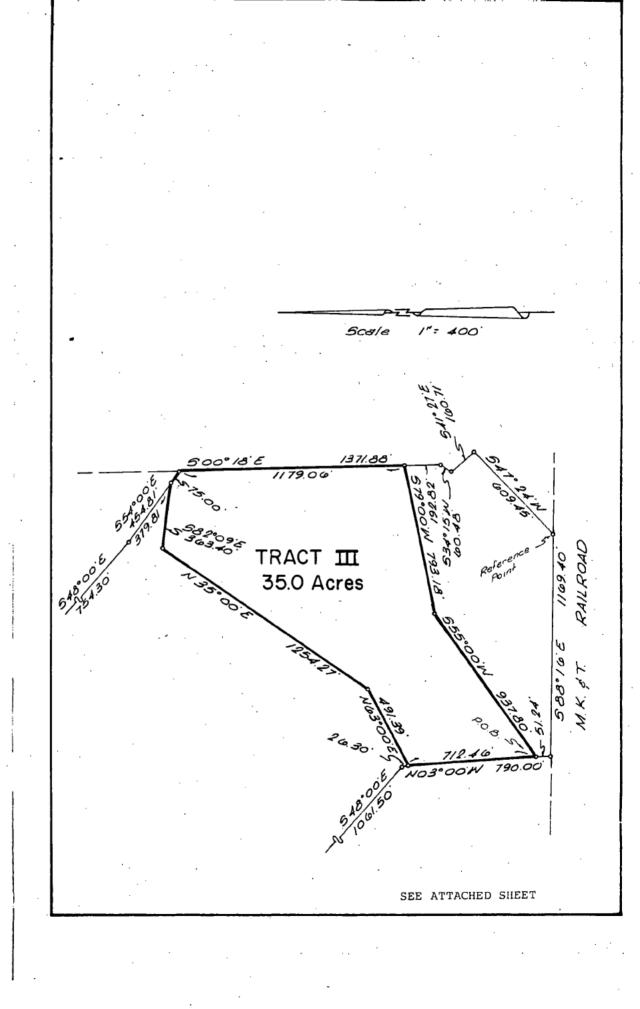
Date Received: 07/17/1992

VOLATILES - 8240 AOUEOUS

, , , , , , , , , , , , , , , , , , , ,		
1,1,2,2-Tetrachloroethane	<5.0	ug/L
Tetrachloroethene	<5.0	ug/L
Toluene	<5.0	ug/L
1,1,1-Trichloroethane	<5.0	ug/L
1,1,2-Trichloroethane	<5.0	ug/L
Trichloroethene	<5.0	ug/L
Trichlorofluoromethane	<5.0	ug/L
Vinyl acetate	<50.0	ug/L
Vinyl chloride	<10.0	ug/L
Xylenes	<5.0	ug/L









## TRACT III EXHIBIT A

FIELDNOTES FOR 35.00 ACRES OF LAND OUT OF THE WILLIAM PETTUS # 2 LEAGUE CALDWELL COUNTY, TEXAS. BEING A PORTION OF THAT 1303.055 ACRES OF LAND CONVEYED TO THE CITY OF SAN MARCOS BY DEED OF RECORDS IN VOLUME 313, PAGE 463 OF THE DEED RECORDS OF CALDWELL COUNTY, TEXAS AND SAID 35.00 ACRES OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING for reference at a point, said point being the most southerly S/E corner of the above mentioned 1303.055 acres of land, said point being also in the north right-of-way line of the M.K. & T. Railroad:

THENCE with the north right-of-way line of the M.K. & T. Railroad S 88 16'E for a distance of 1169.40 feet to a point;

THENCE N 03 00'W for a distance of 51.24 feet to a point for the most southerly S/W corner of the herein described tract of land and Place of Beginning hereof;

THENCE N 03 00'W for a distance of 712.46 feet to a point for the N/E corner hereof;

THENCE N 63 00'E for a distance of 491.39 feet to a point for the inside corner hereof;

THENCE N 35 00'E for a distance of 1254.27 feet to a point for the most northerly corner hereof;

THENCE S 82 09'E for a distance of 363.40 feet to a point for a corner hereof;

THENCE S 54 00'E for a distance of 75.00 feet to a point for a corner hereof;

THENCE S 00 18'E for a distance of 1179.06 feet to a point for the S/E corner hereof;

THENCE S 79 00'W for a distance of 793.18 feet to a point for an inside corner hereof;

THENCE S 55 00'W for a distance of 937.80 feet to the Place of Beginning and containing 35.00 acres of land more or less.

#### TEXAS DEPARTMENT OF HEALTH RESOURCES 1100 West 49th Street Austin, Texas 78756

MUNICIPAL SOLID WASTE DISPOSAL SITE PERMIT APPLICATION NO. 985

Part B - Technical Data

Please read notes 1 and 2 at the end of Part A before starting to complete Part B. This form and supporting documents must be submitted in twelve copies unless otherwise noted. The applicant is encouraged to read this Department's "Municipal Solid Waste Management Regulations", January 1976 Edition, thoroughly before filling out this form. Failure to complete all entries and provide all necessary attachments will delay processing the application. PLEASE TYPE OR PRINT IN BLACK INK.

١.	Site Location:
3.	Name of Applicant:
	Mailing Address: Telephone
•	Zip Code
:.	Type of Operation:
	Type I/ Type II/ Type III/ Type IV/
٠.	Type of Facility:
	Landfill / Incinerator / Transfer Station / Other (Speci
	/
AC	GENTS FOR THE APPLICANT
	ame, address, telephone number and title of persons authorized to act for
аŗ	pplicant. If a registered engineer has been employed to act for the appli
	letter of appointment, as required by Section C-1.2 of the "Municipal Solaste Management Regulations", January 1976, shall be submitted.

TTT	LAND	USE
111	LAND	UJE

Α.	Describe	general land	use within	a one (1) mile radius of the site: (fo
	example:	residential,	commercial,	industrial, agricultural, etc.)

Airport, Agricultural, Educational, and Low Density

#### Residential

(Submission of an aerial photograph, though not required, is recommended as it may clarify land use, topography, vegetation, etc., within vicinity of the site.)

- B. Will the operation of this solid waste facility conform with existing zoning ordinances?(yes) Yes (no) If no, give status of any proposed zoning change which will apply to this site.
- C. Growth trends of the area within a one (1) mile radius of the site during the preceding five (5) years, if known.

Moderate Low Density Residential Expansion

D.	Provisions by the applicant for inspection and maintenance of site durin first year after closure: (If applicant plans to utilize site on a phase sequence, explain phase schedule.)
	See E below.
Ε.	Has use of the site after closing been determined? Yes $X$ No If yes, specify type of use.
	Agricultural

F. It is the responsibility of the herein named applicant to possess or acquire a sufficient interest in or right to the use of the property herein described for the purposes for which a permit may be issued. A permit, if issued does not convey any property rights or interest in either real or personal property, nor does it authorize any injury to private property or invasion of personal rights, nor any infringement of Federal, State or local laws or regulations outside the scope of the authority under which a permit may be issued.

IV. ONE (1) COPY OF A LEGAL DESCRIPTION OF TRACT OR TRACTS OF LAND UPON WHICH THE FACILITY IS LOCATED: The applicant shall provide a signed legal description. The term "Legal Description" means either a metes and bounds description, a plat showing the block and lot number of a recorded subdivision with a reference to the volume and page numbers of the latest convevance as recorded in the Deed Records of the county in which the tract of land is located, or any other description which would be suitable to effectuate the transfer of title to real property. The legal description should include a copy of the latest conveyance to the owner. Where only a portion of the tract is to be used for the landfill, a metes and bounds description of that portion of land is required.

#### V. PLANS AND MAPS:

- A. <u>Twelve copies</u> of an area map (if not previously submitted separately with Part A) showing all information required by Section E-1.9 of the 'Municipal Solid Waste Management Regulations", January 1976.
- B. Three copies of a large-scale plan of the site, prepared in accordance with the design criteria contained in Section E-l or F-l of the "Municipal Solid Waste Management Regulations", January 1976, as appropriate for the type of facility and supported by a narrative statement when necessary, are required. For Type II and III sites, the plan should show all of the information required below which is prefixed by an asterisk (\*). Plans for Type I,IV, and V sites should show all of the applicable information required below:
  - \*1. Site location. (Show boundaries and dimensions of tract of land on which site is to be developed.)
  - \*2. Location of structures, water wells, any utility easements, and distance to nearest residences.
  - \*3. Streets and roads providing ingress and egress to site.
  - \*4. Locations of fences and gates.
  - \*5. Provisions to be made for controlling windblown solid waste.
  - \*6. Provisions for handling hazardous materials and large items.
    - 7. If the site is for a land disposal facility:
      - \*a. The landfill method proposed, e.g., trench, area-fill, (Reference Sec. E-1.8a 'Municipal Solid Waste Management Regulations''.)
      - \*b. The depth of existing groundwater.
      - \*c. The maximum depth of excavation or fill.
      - \*d. Manner and sequence of site development as they pertain to disposal activities.
        - e. Locations of all soil borings (if required by the Department).
      - \*f. The amount of land actually available for landfill.

- \*g. Provisions for wet weather operations.
- \*h. Drainage provisions for controlling surface water on or near the site. Show locations of any proposed dikes, berms, or levees to be located along or near streams, rivers, etc.
- \*j. Fire control facilities, e.g., fire hydrants, fire breaks, earth stockpiles, water tanks.
- k. Existing and finished contours, including the 50-year flood frequency contour if applicable.
- \*1. If an existing pit is to be used, or if sufficient suitable cover material is not available on site, indicate source and soil characteristics of cover material.
- 8. If the site is for a transfer station, incinerator, or other type of processing facility, provide the additional information required by Section F-1.1, Engineering Plan, of the 'Municipal Solid Waste Management Regulations', January 1976.

#### VI. SOILS AND GEOLOGICAL INFORMATION

- A. Applicants for Type I, IV and V land disposal facilities shall provide three copies of information on soil characteristics at the site, such as permeability, clay and sand content, soil structure, and underlying geology. This information must contain laboratory reports of soil characteristics, including the coefficient of permeability, liquid limit, and plasticity index. This data may be obtained through analysis of samples obtained by borings or excavations. No laboratory work need be performed on highly permeable soil layers which obviously will require lining. For relatively impermeable soils, data is required on soil characteristics from ground level to a depth of no more than five (5) feet below the deepest proposed excavation. With less favorable soil conditions, soil data should be furnished to a depth of twenty (20) feet below the deepest proposed excavation. See Section E-1.3, Soil Data, of the "Municipal Solid Waste Management Regulations", January 1976, for boring requirements.
- B. Applicants for Type II and III facilities shall provide three copies of as much information as available on soil characteristics at the site, such as permeability, clay and sand content, soil structure, and underlying geology. This type of information may be obtained from the nearest office of the U. S. Soil Conservation Service. A report containing this information should be obtained from that agency and submitted to the Department with this application The Department may require borings for Type II and III sites when soil conditions are considered questionable.

#### VII. STATEMENT OF APPLICANT

I,	James	в.	Baugh
----	-------	----	-------

state that I have knowledge of the facts herein set forth and that these facts are true and correct, to the best of my knowledge and belief. I further state that, to the best of my knowledge and belief, the project for which application is made will not in any way violate any law, rule, ordinance, or decree of any duly authorized governmental entity having jurisdiction. I further state that I am the applicant or am authorized to act for the city/county/applicant.

(Signature)

City Manager

(Title)

9-22-76

(Date

VIII. NOTARY PUBLIC'S CERTIFICATE

Subscribed and sworn to before me, by the said

JAMES B. BAUGH

this 22nd day of

19/6

to certify which witness my hand and seal of office.

Notary Public in and for

County, Texas.

(seal)

IX. ENGINEER'S SEAL (NOT REQUIRED FOR TYPE I AND V FACILITIES SERVING LESS THAN 5,000 PERSONS AND TYPE II OR III FACILITIES UNLESS APPLICANT UTILIZES SERVICES OF AN ENGINEER)

If the application and supporting data for a permit are perpared under the direction of a registered professional engineer authorized to practice in the State of Texas, place the signature and seal of the engineer in the spaces below.

Engineer's Signature

William B. Brighish D.

William T. Friedrich, P.E.



Seal

## EXHIBIT 3

## AFFIDAVIT OF PUBLISHER

# THE CITY OF SAN MARCOS

November 30, 1976

Mr. Roger B. Tyler Hearings Examiner Texas Department of Health Resources 1100 West 49th Street Austin, Texas 78756

Dear Mr. Tyler:

Please find enclosed the publisher's affidavit for notice of public hearing on the solid waste permit application #640, 984 and 985 - The City of San Marcos, Texas. You will notice that these publications occurred on November 18, 1976 in Lockhart, Texas, Caldwell County and San Marcos, Texas, Hays County.

Should you require further information or assistance, please do not hesitate to contact our offices.

Very truly yours

Doriss Hambrick City Secretary

DH:11s Enclosures



## THE STATE OF TEXAS County of Caldwell

I. C. Tous Mahli fr
of the LOCKHART POST-REGISTER, a newspaper published
of the BOOKHART POST-REGISTER, a newspaper published
weekly in Lockhart, in the County of Caldwell, in the State
of Texas, do hereby solemnly swear that the notice, of which a
true copy is attached hereto, was published in said newspaper
in the issues of
A. D. 19
16
and that a charge of & cents per word for the first insertion and
cents per word for each insertion thereafter, is made, which
is our lowest published classified rate.
SUBSCRIBED and sworn to before me by
Pours Maple-fr on this the
18 day of Movember A. D. 1926
Emigene V Such
Notary Public in and for Caldwell County, Texas

PO# 02247

NOTICE OF PUBLIC HEARING

The City of San Marcos,
Texas has applied to the Texas
Department of health Resources
for permits to operate certain
hereinafter described facilities
which are subject to regulation
under the Texas Solid Waste
Disposal Act. The types of
facilities and locations of same
are as follows:

(1) Permit Application No. 640; an existing Type I municipal solid waste disposal site located 2.5 miles northeast of intersection of State Highway 80 and FM 1984; 0.5 mile northwest of FM 1984 on east side of and within the environs of San Marcos Municipal Airfield (Camp Gary) in Caldwell County, Texas. The site consists of approximately 84 acres of land and is to receive approximately 82 tons of municipal solid waste per day.

(2) Permit Application No. 984, a proposed Type I municipal solid waste disposal site to be located 1.5 miles northeast of intersection fo State Highway 21 and State Highway 80; 950 feet southeast of State Highway 21 and in the southwest corner of and within the environs of San Marcos Municipal Airfield (Camp Gary) in Galdwell County, Texas. The site consists of approximately 52 acres of land and is to receive approximately 82 tons of municipal solid waste per day.

(3) Permit Application No. 985, a proposed Type I municipal solid waste disposal site located northeast of miles 1.5 intersection\_of\_FM\_1984- and -State Highway 80; and 0.4 miles northwest of FM 1984 on north side of Missouri-Kansas-Texas Railroad in the southeast corner of and within the environs of San Marcos Municipal Airfield (Camp Gary) in Caldwell County, Texas. The site consists or approximately 35 acres of land and is to receive approximately 82 tons of municipal solid waste per day.

Pursuant to the provisions of the Texas Solid Waste Disposal Act (Article 4477-7, Vernon's Texas Civil Statutes) and the Texas Department of Health Resources Municipal Solid Waste Management Regulations, and the Administrative Procedure and Texas Register Act, public hearings on the aforesaid applications will be held at:

City Council Chambers
City Hall
630 East Hopkins Street
San Marcos, Texas 78666
at 10:00 am.m, Thursday,
December 16, 1976

to receive evidence for and against the issuance of permits for the aforesaid applications. Each of the applications will be considered separately and on its own merits. All parties having an interest in these matters shall have the right to appear at the hearings, present evidence and be represented by counsel.

Copies of the complete applications may be reviewed at the Texas Department of Health Resources, Austin, Texas, or by contacting the aforesaid applicant.

Issued this 5th day on November, 1976.

Fratis L. Duff, M.D., Director
Texas Department of
Health Resources
Roger B. Tyler
Hearings Examiner
Texas Department of
Health Resources 11-18c

## THE STATE OF TEXAS County of Hays:

Before me, the undersigned, holding the office of NOTARY PUBLIC
in and for Hays County, Texas, personally appeared Balanton
who states under oath that he is the publisher of the Hays County Citizen,
a weekly newspaper which has been regularly and continuously published in Kyle, Hays County, Texas, for a period of more than one year immediately
preceding the date of publication of this notice and that the Notice by
Publication hereto attached was published in the regular edition of said
newspaper for a period of Francisco Ve on the following dates
Marcaller 18 1976,
197,
197,
197, a printed clipping of said notice being hereto
attached.
The said publisher further states that the rate charged for this
oublication is the lowest rate charged commercial advertisers for the
same class of advertising for a like amount of spage.
(Signed)
Lyblisher
Subscribed and sworn to before me this 39 day of 1000000 196,
Kans Mille
NOTARY PUBLIC HAYS COUNTY

#### NOTICE OF PUBLIC HEARING

The City of San Marcos, Texas has applied to the Texas Department of Health Resources for permits to operate certain hereinafter described facilities which are subject to regulation under the Texas Solid Waste Disposal Act. The types of facilities and locations of same are as follows:

(1) Permit Application No. 640, an existing Type I municipal solid waste disposal site located 2.5 miles northeast of Intersection of State Highway 80 and FM 1984: 0.5 mile northwest of FM 1984 on east side of and within the environs of San Marcos Municipal Airfield (Camp. Gary) in Caldwell County, Texas. The site consists of approximately 84 acres of land and is to receive approximately 82 tons of municipal solid waste per day. (2) Permit Application No. 984, a proposed Type I municipal solid waste disposal site to be located 1.5 miles northeast of intersection of State Highway 21 and State Highway 80; 950 feet southeast of State Highway 21 and in the southwest corner of and within the environs of San Marcos Municipal Airfield (Camp Gary) in Caldwell

municipal solid waste per day.

(3) Permit Application No. 985, a proposed Type I municipal solid waste disposal site located 1.5 miles northeast of intersection of FM 1984 and State Highway 80; and 0.4 mile northwest of FM 1984 on north side of Missourl-Kansas-Texas Railroad in the southeast corner of and within the environs of San Marcos Municipal Airfield (Camp Gary) in Caldwell County, Texas. The site consists of approximately 35 acres of land and is to receive approximately 82 tons of municipal solid waste per day.

County, Texas. The site consists of approximately 52 acres of land and is to receive approximately 82 tons of

Pursuant to the provisions of the Texas Solid Waste Disposal Act (Article 4477-7, Vernon's Texas Civil Statutes) and the Texas Department of Health Resources Municipal Solid Waste Management Regulations, and the Administrative Procedure and Texas Register Act, public hearings on the aforesaid applications will be held at:

City Council Chambers
City Hall
630 East Hopkins Street
San Marcos, Texas 78666
at 10:00 a.m., Thursday
December 16, 1976

to receive evidence for and against the issuance of permits for the aforesaid applications. Each of the applications will be considered separately and on its own merits. All parties having an interest in these matters shall have the right to appear at the hearings, present evidence and be represented by counsel.

Copies of the complete applications may be reviewed at the Texas Department of Health Resources, Austin, Texas, or by contacting the aforesaid applicant.

Issued this 5th day of November, 1976.
Fratis L. Duff, M.D., Director
Texas Department of Health Resources
By:/s/Roger B. Tyler
Hearings Examiner

Texas Department of Health Resources 33-1-Igi

# EXHIBIT 4 NOTICES AND LETTERS SENT

#### COUNTY OF TRAVIS

I, Jack C. Carmichael, hereby certify that I am Director of the Solid Waste Management Division, Texas Department of Health Resources; that as an employee of the Texas Department of Health Resources in the regular course of business, with the personal knowledge thereof, and at or near the time of the following acts, events or conditions I made a memorandum or record of the following matters pertaining to the solid waste application under Article 4477-7, Vernon's Texas Civil Statutes, for a solid waste permit:

Name and address of applicant: City of San Marcos P.A. No.s 640, 984, 985

Solid Waste Management Division

2.	. Date application was receiv	ved:	
	A copy of the application the Texas Water Quality Boo of any applicable city or authorities of the appropri	ard, to the Mayor and town, and to the Count	health authorities
· · · · · · · · · · · · · · · · · · ·	Marshael Mrs. grekwiede Iche Leuria, gr TOV 0 9 1976 de Levelins TACB	Date Permit Application Sent	Public Hearing Notice Sent
∠ ∴ _`b.	TWQB		NOV 0 9 1976
∠ <u> </u>	TWDB		HOV 0 9 1978
_'	. Mayor		NOV 0 9 1976
	Judge		MAY 0 9 1976
f.	City Health Authority		·
≝≚ ~g.	County Health Authority	·	NOV 0 9 1976
∠ ∠ ∠h.	Region, TDHR (6)		NOV 0 9 1978
12 v i.	, FAA - HOUSTON		MOV 0 9 1976
<u>√</u> ⊻ <b>j</b> ,	. Corps of Engineers £ Worth		MOV 0 9 1976
k.	. Highway Department		
nnie Bock, II. 1.	Representative		NOV 0 9 1976
ad Dorcotty m.	Senator	•	MOV 0 9 1976
n.	. Texas Pollution Report		MOV 0 9 1978
<u>~</u> o.	. The Process Company, Inc.	· · · · · · · · · · · · · · · · · · ·	NOV 0 9 1978
Witness my h	nand this	_day of	ber , 1976.
		Jack C. Carm	Lichael, P. E.

Seage P. M. Mahar



Fratis L. Duff, M.D., Dr.P.H. Director Raymond T. Moore, M.D. Deputy Director

1100 West 49th Street Austin, Texas 78756 (512) 454-3781

November 5, 1976

Members of the Board

Robert D. Moreton, Chairman William J. Foran, Vice Chairman Royce E. Wisenbaker, Secretary N. L. Barker Jr. Roderic M. Bell Johnnie M. Benson H. Eugene Brown Bill Burton Charles Max Cole Francis A. Conley William J. Edwards Sterling H. Fly Jr. Raymond G. Garrett Bob D. Glaze Blanchard T. Hollins Maria LaMantia Philip Lewis

Hon. James Bauger City Manager City Hall San Marcos, Texas 78666

Re: Solid Waste Permit Applications Nos. 640, 984 & 985
The City of San Marcos, Texas

Dear Mr. Bauger:

This is in reference to the above captioned municipal solid waste disposal site permit applications filed with this Department.

Enclosed is a NOTICE OF PUBLIC HEARING which must be published one time in a newspaper of general circulation in both the Counties of Hays and Caldwell since the sites are located in Caldwell and the hearing will be held in Hays County. This Notice must be published in each county at least twenty (20) days prior to the scheduled hearings. Please note that one Notice refers to all applications. Publication is done at the expense of the applicant and a publisher's affidavit must be forward to this Department at least five (5) days prior to the scheduled hearings.

The aforesaid affidavit, all correspondence or other material concerning these applications should be sent to:

Texas Department of Health Resources Division of Solid Waste Management 1100 West 49th Street Austin, Texas 78756

If we can be of further assistance, please advise.

Very truly yours,

Roger B. Tyler Hearings Examiner

Enclosure

#### NOTICE OF PUBLIC HEARING

The City of San Marcos, Texas has applied to the Texas Department of Health Resources for permits to operate certain hereinafter described facilities which are subject to regulation under the Texas Solid Waste Disposal Act. The types of facilities and locations of same are as follows:

- (1) Permit Application No. 640, an existing Type I municipal solid waste disposal site located 2.5 miles northeast of intersection of State Highway 80 and FM 1984; 0.5 mile northwest of FM 1984 on east side of and within the environs of San Marcos Municipal Airfield (Camp Gary) in Caldwell County, Texas. The site consists of approximately 84 acres of land and is to receive approximately 82 tons of municipal solid waste per day.
- (2) Permit Application No. 984, a proposed Type I municipal solid waste disposal site to be located 1.5 miles northeast of intersection of State Highway 21 and State Highway 80; 950 feet southeast of State Highway 21 and in the southwest corner of and within the environs of San Marcos Municipal Airfield (Camp Gary) in Caldwell County, Texas. The site consists of approximately 52 acres of land and is to receive approximately 82 tons of municipal solid waste per day.
- (3) Permit Application No. 985, a proposed Type I municipal solid waste disposal site located 1.5 miles northeast of intersection of FM 1984 and State Highway 80; and 0.4 mile northwest of FM 1984 on north side of Missouri-Kansas-Texas Railroad in the southeast corner of and within the environs of San Marcos Municipal Airfield (Camp Gary) in Caldwell County, Texas. The site consists or approximately 35 acres of land and is to receive approximately 82 tons of municipal solid waste per day.

Pursuant to the provisions of the Texas Solid Waste Disposal Act (Article 4477-7, Vernon's Texas Civil Statutes) and the Texas Department of Health Resources Municipal Solid Waste Management Regulations, and the Administrative Procedure and Texas Register Act, public hearings on the aforesaid applications will be held at:

City Council Chambers City Hall 630 East Hopkins Street San Marcos, Texas 78666 at 10:00 a.m., Thursday, December 16, 1976

to receive evidence for and against the issuance of permits for the aforesaid applications. Each of the applications will be considered separately and on its own merits. All parties having an interest in these matters shall have the right to appear at the hearings, present evidence and be represented by counsel.

Copies of the complete applications may be reviewed at the Texas Department of Health Resources, Austin, Texas, or by contacting the aforesaid applicant.

Issued this 5th day of November , 1976.

Fratis L. Duff, M. D., Director Texas Department of Health Resources

Ву

Roger B. Tyler / Hearings Examiner

Texas Department of Health Resources

AUSTIN

Coordinates N 29°52.95' W 97°51.25'

TEXAS THRU: P. W. Mallory, M. D.

#### INTER-OFFICE

	Jack C. Calmichael, f. L.			
•	Director	George	J. Dellaportas, M. D.	
FROM	Division of Solid Waste Management TO	Region	6	
	Solid Waste - Caldwell County	ATTN:	Thomas D. Tiner, P. E.	
SUBJECT_	City of San Marcos - Permit Application No.	985		
	1.5 Mi. NE of Int. of FM 1984 & SH 80; 0.4	Mi. NW of	FM 1984 on N	•
	Cide of Missouri Venses Bailmad			

Attached is a copy of an application for a permit to operate a municipal solid waste facility which is located within your region.

The "Municipal Solid Waste Management Regulations" require either the submission of technical data or that a registered professional engineer prepare an engineering report in support of a permit application. Therefore, we consider it appropriate that a professional engineer from your region represent the Texas Department of Health Resources in the conduct of the on-site inspection and evaluation of the application. The "Administrative Procedure and Texas Register Act" (Article 6252-13a, Texas Revised Civil Statutes) requires the applicant's engineer and our representatives to be present at the public hearing and introduce the data under oath.

Please conduct a site evaluation and submit your report within 30 days including the following:

- 1. To the extent possible, verification of the technical data and other information included by the applicant in the application.
- 2. If it is an existing facility, complete our standard inspection form including your comments concerning past operation and maintenance.
- 3. Your opinion concerning the technical adequacy of the existing or proposed facility.
- 4. Your comments concerning public interest and any significant input you would expect during the public hearing.
- 5. Other pertinent information which should be considered during our evaluation of this facility.

We appreciate your support of the solid waste management program.

JCC: kjh Attachment

My My

SIGNED				
			•	
DATE	November	3,	1976	



Fratis L. Duff, M.D., Dr.P.H. Director Raymond T. Moore, M.D. Deputy Director

1100 West 49th Street Austin, Texas 78756 (512) 454-3781

Members of the Board

N. L. Barker Jr.

Roderic M. Beil Johnnie M. Benson H. Eugene Brown Bill Burton Charles Max Cole

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Bob D. Glaze Blanchard T. Hollins

Maria LaMantia Philip Lewis

Raymond G. Garrett

Robert D. Moreton, Chairman

William J. Foran, Vice-Chairman

Royce E. Wisenbaker, Secretary

November 4, 1976

Mr. Hugh C. Yantis, Jr., P. E. Executive Director
Texas Water Quality Board
P. O. Box 13246
Capitol Station
Austin, Texas 78711

ATTENTION: Solid Waste Branch

Central Operations Division

Subject: Solid Waste - Caldwell County

City of San Marcos - Permit Application No. 985

1.5 Mi. NE of Int. of FM 1984 & SH 80; 0.4 Mi. NW of FM 1984 on

N Side of Missouri Kansas Railroad Coordinates N 29°52.95° W 97°51.25°

Dear Mr. Yantis:

Transmitted herewith for your review is a copy of a permit application for a municipal solid waste disposal site.

Section 4(e)(1) of the "Solid Waste Disposal Act", Article 4477-7, Vernon's Texas Civil Statutes, requires that this Department provide you an opportunity to present comments and recommendations on a permit application before the Department acts on the application.

In accordance with the requirements of Section C-2 of this Department's "Municipal Solid Waste Management Regulations" dated January 1976, a public hearing will be held, following due notice, before a permit may be issued. We will advise you of the date and place of the public hearing when it has been scheduled. Although your comments may be submitted at the public hearing, we would appreciate receiving them within 30 days of the date of this letter to assist us in our technical review.

If additional information should be required, please do not hesitate to contact us.

Sincerely,

Homica

G. R. Herzik, Jr., P. E.
Deputy Director for Environmental
and Consumer Health Protection

DWG W

MMI:kjh Enclosure



Fratis L. Duff, M.D., Dr.P.H.
Director
Raymond T. Moore, M.D.
Deputy Director
November 4. 1976

1100 West 49th Street Austin, Texas 78756 (512) 454-3781

Members of the Board

N. L. Barker Jr. Roderic M. Bell Johnnie M. Benson H. Eugene Brown Bill Burton Charles Max Cole

Francis A, Conley William J. Edwards

Sterling H. Fly Jr.

Bob D. Glaze
Blanchard T. Hollins

Maria LaMantia Philip Lewis

Raymond G. Garrett

Robert D. Moreton, Chairman .

William J. Foran, Vice-Chairman

Royce E. Wisenbaker, Secretary

Mr. Charles R. Barden, P. E. Executive Director Texas Air Control Board 8520 Shoal Creek Austin, Texas 78758

ATTENTION: Agency Operations - Planning

Subject: Solid Waste - Caldwell County

City of San Marcos - Permit Application No. 985

1.5 Mi. NE of Int. of FM 1984 & SH 80; 0.4 Mi. NW of FM 1984 on

N Side of Missouri Kansas Railroad Coordinates N 29°52.95' W 97°51.25'

Dear Mr. Barden:

Transmitted herewith for your review is a copy of a permit application for a municipal solid waste disposal site.

Section 4(e)(1) of the "Solid Waste Disposal Act", Article 4477-7, Vernon's Texas Civil Statutes, requires that this Department provide you an opportunity to present comments and recommendations on a permit application before the Department acts on the application.

In accordance with the requirements of Section C-2 of this Department's "Municipal Solid Waste Management Regulations" dated January 1976, a public hearing will be held, following due notice, before a permit may be issued. We will advise you of the date and place of the public hearing when it has been scheduled. Although your comments may be submitted at the public hearing, we would appreciate receiving them within 30 days of the date of this letter to assist us in our technical review.

If additional information should be required, please do not hesitate to contact us.

Sincerely,

Horice

G. R. Herzik, Jr., P. E.
Deputy Director for Environmental
and Consumer Health Protection

MM:kjh Enclosure





Fratis L. Duff, M.D., Dr.P.H. Director Raymond T. Moore, M.D. Deputy Director

1100 West 49th Street Austin, Texas 78756 (512) 454-3781 Members of the Board

N. L. Barker Ir.

Roderic M. Bell Johnnie M. Benson H. Eugene Brown Bill Burton Charles Max Colé

Francis A. Conley

Bob D. Glaze Blanchard T. Hollins

Maria LaMantia Philip Lewis

William J. Edwards Sterling H. Fly Jr.

Raymond G. Garrett

Robert D. Moreton, Chairman

William J. Foran, Vice-Chairman Royce E. Wisenbaker, Secretary

November 4, 1976

General James M. Rose
Executive Director
Texas Water Development Board
P. O. Box 13087, Capitol Station
Austin, Texas 78711

ATTENTION: Mr. Everett W. Rowland, P. E.

Director, Flood Protection and Disaster

Assistance Division

Subject: Solid Waste - Caldwell County

City of San Marcos - Permit Application No. 985

1.5 Mi. NE of Int. of FM 1984 & SH 80; 0.4 Mi. NW of FM 1984 on

N Side of Missouri Kansas Railroad Coordinates N 29°52.95° W 97°51.25°

Dear General Rose:

Transmitted herewith for your review is a copy of a permit application for a municipal solid waste disposal site.

It is our policy to seek the recommendations of the Texas Water Development Board regarding the requirements of the Texas Water Code. In particular, we will appreciate your recommendations as to whether or not an "Application for Approval of a Levee Project" should be submitted by the applicant.

In accordance with the requirements of Section C-2 of this Department's "Municipal Solid Waste Management Regulations" dated January 1976, a public hearing will be held, following due notice, before a permit may be issued. We will advise you of the date and place of the public hearing when it has been scheduled. Although your comments may be submitted at the public hearing, we would appreciate receiving them within 30 days of the date of this letter to assist us in our technical review.

If additional information should be required, please do not hesitate to contact us.

Sincerely,

fr. -c

G. R. Herzik, Jr., P. E.
Deputy Director for Environmental
and Consumer Health Protection

MN:kjh Enclosure



Fratis L. Duff, M.D., Dr.P.H. Director Raymond T. Moore, M.D. Deputy Director

1100 West 49th Street Austin, Texas 78756 (512) 454-3781

November 4, 1976

Mr. W. N. Dale Chief, Airports District Office Federal Aviation Administration 8800 Paul B. Koonce Drive, Room 225 Houston, Texas 77017

Subject: Solid Waste - Caldwell County

City of San Marcos - Permit Application No. 985
1.5 Mi. NE of Int. of FM 1984 & SH 80; 0.4 Mi. NW of FM 1984 on N Side of Missouri Kansas Railroad
Coordinates N 29°52.95' W 97°51.25'

Dear Mr. Dale:

This Department is evaluating the enclosed permit application for a solid waste disposal site. In view of possible hazards to aircraft from birds attracted to landfill operations, your organization may wish to comment on this application.

In accordance with the requirements of Section C-2 of this Department's "Municipal Solid Waste Management Regulations" dated January 1976, a public hearing will be held, following due notice, before a permit may be issued. We will advise you of the date and place of the public hearing when it has been scheduled. Although your comments may be submitted at the public hearing, we would appreciate receiving them within 30 days of the date of this letter to assist us in our technical review.

If additional information should be required, please do not hesitate to contact us.

Sincerely,

G. R. Herzik, Jr., P. E.
Deputy Director for Environmental
and Consumer Health Protection

MMN:kjh Enclosure

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Members of the Board

Robert D. Moreton, Chairman William J. Foran, Vice-Chairman Royce E. Wisenbaker, Secretary N. L. Barker Jr. Roderic M. Bell Johnnie M. Benson H. Eugene Brown Bill Burton Charles Max Cole Francis A. Conley William J. Edwards Sterling H. Fly Jr. Raymond G. Garrett Bob D. Glaze Blanchard T. Hollins Maria LaMantia Philip Lewis

November 3, 1976

Colonel John F. Wall
District Engineer
Fort Worth District
P. O. Box 17300
Fort Worth, Texas 76102

Subject: Solid Waste - Caldwell County
City of San Marcos - Permit Application No. 985
1.5 Mi. NE of Int. of FM 1984 & SH 80; 0.4 Mi. NW of FM 1984 on
N Side of Missouri Kansas Railroad
Coordinates N 29°52.95' W 97°51.25'

Dear Colonel Wall:

Transmitted herewith for your review and comment, in consonance with Section 404 of the "Federal Water Pollution Control Act", is a copy of an application for a permit to operate a municipal solid waste disposal site.

In accordance with the requirements of Section C-2 of this Department's "Municipal Solid Waste Management Regulations" dated January 1976, a public hearing will be held, following due notice, before a permit may be issued. Please review this permit application in conjunction with permit application Nos. 640 and 984.

We will advise you of the date and place of the public hearing when it has been scheduled. Although your comments may be submitted at the public hearing, we would appreciate receiving them within 30 days of the date of this letter to assist us in our technical review.

If additional information should be required, please do not hesitate to contact us.

Sincerely,

C. R. Herzik, Jr., P. E. Deputy Director for Environmental and Consumer Health Protection

MMN:kjh Enclosura

cc: Region 6, TDHR
County Health Officer
City Health Officer

Jan Jan

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Members of the Board

N. L. Barker Jr. Roderic M. Bell Johnnie M. Benson H. Eugene Brown

Charles Max Cole Francis A. Conley William J. Edwards

Sterling H. Fly Ir. Raymond G. Garrett Bob D. Glaze Blanchard T. Hollins

Maria LaMantia

Bill Burton

Robert D. Moreton, Chairman

William J. Foran, Vice-Chairman

Royce E. Wisenbaker, Secretary

## Texas Department of Health Resources

Fratis L. Duff, M.D., Dr.P.H. Director Raymond T. Moore, M.D. Deputy Directioner 4, 1976 1100 West 49th Street Austin, Texas 78756 (512) 454-3781

Nilon Tallant, M. D., Acting Director San Marcos-Hays County Health Department 303 West San Antonio Street San Marcos, Texas 78666

Subject: Solid Waste - Caldwell County

City of San Marcos - Permit Application No. 985

Philip Lewis 1.5 Mi. NE of Int. of FM 1984 & SH 80: 0.4 Mi. NW of FM 1984 on

N Side of Missouri Kansas Railroad Coordinates N 29°52.95' W 97°51.25'

Dear Dr. Tallant:

Transmitted herewith for your review is a copy of a permit application for a municipal solid waste disposal site.

Section 4(e)(1) of the "Solid Waste Disposal Act", Article 4477-7, Vernon's Texas Civil Statutes, requires that this Department provide you an opportunity to present comments and recommendations on a permit application before the Department acts on the application.

In accordance with the requirements of Section C-2 of this Department's "Municipal Solid Waste Management Regulations" dated January 1976, a public hearing will be held, following due notice, before a permit may be issued. We will advise you of the date and place of the public hearing when it has been scheduled. Although your comments may be submitted at the public hearing, we would appreciate receiving them within 30 days of the date of this letter to assist us in our technical review.

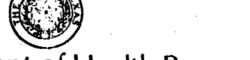
If additional information should be required, please do not hesitate to contact us.

Sincerely,

Jack C. Carmichael, P. E. Director Division of Solid Waste Management

MMN:kjh Enclosura

cc: Local Health Services, TDHR



Members of the Board

N. L. Barker Ir. Roderic M. Bell Johnnie M. Benson H. Eugene Brown

Francis A. Conley William J. Edwards

Sterling H. Fly Jr. Raymond G. Garrett

Bill Burton Charles Max Cole

Robert D. Moreton, Chairman

William J. Foran, Vice-Chairman

Royce E. Wisenbaker, Secretary

## Texas Department of Health Resources

Fratis L. Duff, M.D., Dr.P.H. Director Raymond T. Moore, M.D. Deputy Director 4, 1976

1100 West 49th Street Austin, Texas 78756 (512) 454-3781

Honorable Leonard W. Scott County Judge County of Caldwell Lockhart, Texas 78644

Bob D. Glaze Blanchard T. Hollins Subject: Solid Waste - Caldwell County Maria LaMantia City of San Marcos - Permit Application No. 985 Philip Lewis 1.5 Mi. NE of Int. of FM 1984 & SH 80; 0.4 Mi. NN of FM 1984 on N Side of Missouri Kansas Railroad

Dear Judge Scott:

Transmitted herewith for your review is a copy of a permit application for a municipal solid waste disposal site.

Coordinates N 29°52.95° W 97°51.25°

Section 4(e)(1) of the "Solid Waste Disposal Act", Article 4477-7, Vernon's Texas Civil Statutes, requires that this Department provide you an opportunity to present comments and recommendations on a permit application before the Department acts on the application.

In accordance with the requirements of Section C-2 of this Department's "Municipal Solid Waste Management Regulations" dated January 1976, a public hearing will be held, following due notice, before a permit may be issued. We will advise you of the date and place of the public hearing when it has been scheduled. Although your comments may be submitted at the public hearing, we would appreciate receiving them within 30 days of the date of this letter to assist us in our technical review.

If additional information should be required, please do not hesitate to contact us.

Sincerely,

Hom

Jack C. Carmichael, P. E. Director Division of Solid Waste Management

MMN:kih Enclosure

Fratis L. Duff, M.D., Dr.P.H. Director Raymond T. Moore, M.D. Deputy Director November 4, 1976 1100 West 49th Street Austin, Texas 78756 (512) 454-3781

J. Tom Connolly, M. D. County Health Officer 214 W. San Antonio St. Lockhart, Texas 78644

Subject: Solid Waste - Caldwell County

City of San Marcos - Permit Application No. 985

Maria LaManti
Philip Lewis

1.5 Mi. NE of Int. of FM 1984 & SH 80: 0.4 Mi. NW of FM 1984 on

N Side of Missouri Kansas Railroad Coordinates N 29°52.95° W 97°51.25°

Dear Dr. Connolly:

Transmitted herewith for your review is a copy of a permit application for a municipal solid waste disposal site.

Section 4(e)(1) of the "Solid Waste Disposal Act", Article 4477-7, Vernon's Texas Civil Statutes, requires that this Department provide you an opportunity to present comments and recommendations on a permit application before the Department acts on the application.

In accordance with the requirements of Section C-2 of this Department's "Municipal Solid Waste Management Regulations" dated January 1976, a public hearing will be held, following due notice, before a permit may be issued. We will advise you of the date and place of the public hearing when it has been scheduled. Although your comments may be submitted at the public hearing, we would appreciate receiving them within 30 days of the date of this letter to assist us in our technical review.

If additional information should be required, please do not hesitate to contact us.

Sincerely,

Jack C. Carmichael, P. E.

Hom

Director

Division of Solid Waste Management

MMN:kjh Enclosure

HMM

Members of the Board

Robert D. Moreton, Chairman William I. Foran, Vice-Chairman Royce E. Wisenbaker, Secretary N. L. Barker Jr. Roderic M. Bell Johnnie M. Benson H. Eugene Brown Bill Burton Charles Max Cole Francis A. Conley William J. Edwards Sterling H. Fly Jr. Raymond G. Garrett Bob D. Giaze Blanchard T. Hollins Maria LaMantia Philip Lewis

## EXHIBIT 5

## AGENCY COMMENTS



## TEXAS AIR CONTROL BOARD

PHONE 512/451-5711 8520 SHOAL CREEK BOULEVARD

CHARLES R. BARDEN, P. E. · EXECUTIVE DIRECTOR

JOHN L. BLAIR, Chairman WILLIE L. ULICH, Ph.D., P.E., Vice Chairman WILLIAM N. ALLAN JOE C. BRIDGEFARMER, P.E. FRED HARTMAN

AUSTIN, TEXAS - 78758

CHARLES R. JAYNES D. JACK KILIAN, M.D. WILLIAM D. PARISH E. W. ROBINSON, P.E.

December 15, 1976

Mr. G. R. Herzik, Jr., P.E. Deputy Director for Environmental and Consumer Health Protection Texas Department of Health Resources 1100 West 49th Street Austin, Texas

Solid Waste - Caldwell County Re:

City of San Marcos - Permit Application No. 985

Dear Mr. Herzik:

We have reviewed the above cited document and recommend approval. An investigation of the site indicates outdoor burning is prohibited under Texas Air Control Board Regulation I, Rule 101.28. We would remind the applicant that the site must be operated in compliance with all Board Rules and Regulations specifically those pertaining to outdoor burning, particulate matter, and nuisances.

Thank you for the opportunity to review this application. If we can be of further assistance, please let me know.

Mincerely yours,

Bill Stewart, P.E. Deputy Director

Control and Prevention

Mr. Eugene Fulton, Regional Supervisor, Waco



AUSTIN

**TEXAS** 

#### INTER-OFFICE

					To:	G. R. F	lerzik, Jr.,	P.	Ε.
FROMEa	rl A.	Ballman, J	P. E.	 . то	For:	Jack C.	Carmichael	, P.	E.

SUBJECT Solid Waste - Caldwell County

City of San Marcos - Permit Application No. 985 - Site 3 (35 acres) 1.5 Mi. NE of Int. of FM 1984 & SH 80; 0.4 Mi. NW of FM 1984 on N mide of Missouri Kansas Railroad Coordinates: N 29° 52.95' W 97° 51.25'

In response to your memorandum dated November 3, 1976, Mr. James S. Burwell, R. S., San Marcos-Hays County Health Department, and the writer, inspected the subject solid waste site on November 30, 1976. The following comments are made for your information along with an attached copy of the completed inspection report:

The proposed solid waste site contains 35 acres. It is located in the southeast corner of the City's Camp Gary property and on the north side of the Missouri Kansas Railroad. Surface drainage in the immediate area is to the south and east.

The soil in this area is clay of medium to high plasticity. According to the permit application, part of this area contains highly permeable soil that may make it unsuitable for landfill operation unless the trenches are lined. Landfill trenches should not be dug in the area where permeable soil would be encountered.

The presence of free water at approximately ten feet indicates that landfill trench depths would be limited to seven feet. The sides and bottoms of all landfill trenches or disposal areas must be properly lined with a minimum of three (3) feet of selected impermeable clay-type material to prevent the percolation of leachate into the groundwater.

Suitable working face dikes and/or any other suitable water diversion methods should be provided to control and minimize the flow of rain or surface water onto and/or through the disposal area to minimize contact between the water and solid waste.

Rainfall runoff within the landfill trenches must not be discharged from

Solid waste sites 1 and 2, if permitted by the State, are expected to serve San Marcos' needs until 1990. Prior to that time, the City should reevaluate its solid waste disposal needs and methods before considering using site 3, if approved.

Based on the review of the application and inspection of the disposal site, it is the writer's opinion that the disposal of municipal waste at this site may be conducted in consonance with applicable health and sanitation laws, but at high cost to the City and the risk of underground water pollution. The high cost to the City would be brought about by the relocation of roads, relocation of ditches, maximum trench depth of seven feet, and lining of trenches

If additional information is needed, please let me know.SIGNED M. S.

#### INSPECTION REPORT

### MUNICIPAL SOLID WASTE DISPOSAL SITE

### TEXAS DEPARTMENT OF HEALTH RESOURCES

1.	Perm	ilt o	r Ann	lication No. 985 Classification Type I
2.	Loca	tion	Co	unty Caldwell City San Marcos Region 6
-•	Stre	et o	r Roa	d 1.5 Mi. NE of Int. of FM 1984 & SH 80, 0.4 mi. NW of FM 1984 on N. side of
	Coor	dina	tes	N 29° 52.95' W 97° 51.25' MKRR
3.	Name	of I	Dispo	sal Site San Marcos Sanitary LF Site Owner City of San Marcos
	Site	One	rator	(City, CdVdty/ NdWddd) San Marcos
		•		San Marcos and surrounding area Population Served 30,000
4.				tacted During Visit William T. Friedrich, Director of Public Works (512) 392-1
٠.	OLL	CIAI	3 (01)	tacted builing visit
5	Per	sone i	Parti	cinating in Inspection Earl A. Ballman, P. F., TDHR James S. Burwell San
٠.	161:	Mar	cos-H	cipating in Inspection <u>Earl A. Ballman, P. E., TDHR, James S. Burwell, San</u> ays County Health Dept., Ramino Lugo, San Marcos Sanitary Director
6.	Offi	Cial	c Roc	ponsible for Site Mayor Emmie Craddock and Jim Baugh, City Manager, San
٥.	OIL	Mar	cos C	ity Hall 630 F Norking San Marcon 78666
7.	Pur	2050	of In	spection memo dated November 4, 1976, request engineering inspection and
<i>'</i> •	rur	pre	parat	ion reports in support of a permit application
8.	Date			Inspection initial Date of Last Correspondence 11-4-76
9.	Land	d Uca	Last With	in One Mile of Disposal Site agricultural, Gary Job Corps Training Center,
7.	Lan	San	Marc	os Municipal Airport & low density residential
10.	Bri			tion of Site and Operation: TrenchproposedArea Other
	DLI	er De	scrip	Depth at Deepest Excavation proposed 8 ft.
11.	Size	e of	Site	35 acres Amount of Land Remaining 35 acres
12				Public Road 300 ft. Water Well 480 ft. Residence 360 ft.
••				Stream 2600 ft. Airport 1040 ft. Business 1100 ft.
13.	Ref	use C	olled	tion: City X County Contractor Individuals X
			01100	
		14	Acce	98
E-1.2	۱.	• • •	A.	All weather access to an unloading area provided?yes
D-1.9			В.	
1/-1.7	,			
E-1.	2c	15.	Secu	rity
			۸.	Is the site adequately fenced with lockable gates?no
			В.	If lockable gates are used, are adequate containers provided outside the
				gates when the site is closed?
			С.	If containers are provided, are they effectively utilized?
			_D .	If lockable gates are not provided are alternate means of access control
				authorized by the Department?
			Ε.	If alternate means are authorized, are they effective?
		16.	Wate	r Pollution
E-1.	48		Α.	Is solid waste placed in groundwater?
E-1.			В.	Were leachates observed? (If yes, discuss in comments)
E-1.			Ċ,	Is solid waste deposited within 500 feet of a public water system raw
			- •	water intake or a water treatment plant?no
E-1.	. 5		D.	Solid waste deposited within 500 feet of a drinking water supply well?yes
E-1.			£.	Can surface drainage enter working face or excavation?drainage.ditches to
				relocate

1,00	Ι.,	Site subject to flooding? possibleWhen flooded? Use application as source
17	. Open	rational Standards
		not to be
2.1	Α.	Burning observed or in evidence? burned Burning authorized? ?
2.1	В.	Adequate fire protection provided? yes Method? San Marcos Fire Dept
-2.2	C	Attendant on duty when site is open?will
-2.2	υ.	Adequate signs posted for internal control when attendant is not
	4.	on duty?N/A
·2·2 ·2·3	Ε.	Unloading of waste confined to as small an area as possible?
	F.	Blowing paper problem? N/A Controls N/A  Are hazardous materials accepted?
-2.4	G.	
-2.5	н.	If yes, cover in comments.  Adequate provisions for: Brush N/A Dead animals N/A Bulky items N/A
-2.5 -2.6	ι.	Fly population N/A Evidence of rodents N/A Birds N/A
-2.7		Is scavenging occurring?
-2.9	к.	is cover adequate and applied at required frequency?
- 2.9	l.,	Closed sections of landfill properly maintained?
	М.	Is site in compliance with all permit special provisions?
	•••	If no, explain in comments:
	N.	Adequate equipment and maintenance of equipment provided?yes
	0.	Adequate staff provided for proper disposal?yes
-2.1	ρ.	If salvaging is practiced is it adequately controlled?yes
· Summar		un-compliance:
. Simmar	y or n	on-compilance:
Commen	ts (us	e additional sheets as necessary):
, chart	(4.	the terminal formation of the terminal forma
1. Recomm	endat i	ons (use additional sheets as necessary):
		$\cdot$
,		
. ACLION	reque	sted of Central Office:
	·	
•		
aspected b	y Ea	rl A. Ballman Date 11-30-76
pproved by		0, 209 Date
PPIOVED by		Date
	•	•

Please attach copies of letters originated by Regional Office)

Texas Water Quality Board

> 1700 North Congress Stephen F. Austin Building Box 13246 Capitol Station Austin, Texas 78711

November 26, 1976

RE: Municipal Solid Waste,
City of San Marcos,
Permit Application No. 985, Area III
Proposed Site Evaluation
Caldwell County

Mr. G. R. Herzik, Jr., P. E.
Deputy Director for Environmental
and Consumer Health Protection
Texas Department of Health Resources
1100 West 49th Street
Austin, Texas 78756



J. Douglass Toole

M. F. Frost Fratis L. Duff, MD Clayton T. Garrison

Ben Ramsey

James M. Rose

Hugh C. Yantis, Jr.

CHAIRMAN Frank H. Lewis

VICE CHAIRMAN

EXECUTIVE DIRECTOR

Dear Mr. Herzik:

The Texas Water Quality Board has received your letter dated November 4, 1976 requesting us to review and evaluate the water quality aspects of the application and supporting information from the City of San Marcos for a municipal solid waste disposal site. We note that in addition to this proposed site (P. A. 985, Area III) the City of San Marcos has applied to the Texas Department of Health Resources for permits to operate two other disposal sites which are located in the vicinity of Camp Gary. One of these is an existing site (P. A. 640, Area I) while the other is a proposed site (P. A. 984, Area II).

The generalized geologic setting as set forward in the letter of this date concerning permit application No. 640 (Area I) is also applicable to this site. The available information indicates that the site is underlain at a relatively shallow depth by permeable groundwater-bearing soil material which yields water to numerous wells in the area.

The subsurface soils investigation report contained the logs of two auger borings which were drilled in Area III. These borings suggest that soil material described as dark gray clay with calcareous particles (CH) and as tan clay with caliche (CH) occurs in the upper  $5\ 1/2$  to  $6\ 1/2$  feet at the site. This material is in turn underlain to the total depth of the borings (i.e. to 15.0

Mr. G. R. Herzik, Jr. Page 2 November 26, 1976

and 10.5 feet) by material described as tan sandy clay with caliche (moist) (CL). Groundwater was encountered at 13.1 feet below the ground surface in one of the borings and the water surface rose to within 10.1 feet of the ground surface within 10 minutes after the water-bearing stratum was penetrated. The other boring encountered a "rock layer or boulder" at 10.5 feet and the boring was halted at this level. A limited amount of Atterberg limit data was submitted for the soil material underlying the disposal site; however, there was a complete lack of permeability test data. The operational plan for Area III contained in the engineering report suggests that the trenches at the site should not be excavated to a depth greater than eight feet.

In the absence of further detailed information which clearly indicates that all trenches will be excavated into soil material which is sufficiently impermeable to adequately prevent the exfiltration of leachates from the site and which clearly delineates the groundwater levels at the proposed disposal site, it appears that the site may pose a potential hazard to the groundwater resources of the area. If this site is approved by the Texas Department of Health Resources, the six comments set forward in the letter of this date concerning permit application No. 640 (Area I) may be considered to decrease the hazard to the ground and surface water quality in the vicinity of the proposed disposal site. Comment number three should be reworded to state "Monitor wells should be installed and sampled on a periodic schedule."

If we may be of further assistance, please contact us.

Very truly yours

Hugh O. Yantis Jr Executive Director

cd: TWQB District 8 Office

JAMES M. ROSE EXECUTIVE DIRECTOR

### TEXAS WATER DEVELOPMENT BOARD

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P.O. BOX 13087 CAPITOL STATION November 24, 1976

AREA CODE 512 475 3187 1700 NORTH CONGRESS AVENUE

> IN REPLY REFER TO TWDBE

Mr. G. R. Herzik, Jr., P.E. Deputy Director for Environmental and Consumer Health Protection Texas Department of Health Resources 1100 W. 49th Street Austin, Texas 78756

Dear Mr. Herzik:

Reference is made to your letter of November 4 concerning Application No. 985 for the City of San Marcos' municipal solid waste disposal site located 1.5 miles northeast of the intersection of Farm-to-Market Road 1984 and State Highway 80 and 0.4 mile northwest of Farm-to-Market Road 1984 on the north side of the Missouri Kansas Railroad track. A review of this application has been made.

An Application for Approval of a Levee Project need not be filed for this proposal. It was determined from our review that the proposed project, since it will not change the floodwater of any stream, does not come within the purview of the Texas Water Development Board authority under Section 11.458 of the Texas Water Code.

Sincerely,

Everett W. Rowland, P.E.

Director

Flood Protection and

Disaster Assistance Division

BRANCH 244018 B



DEPARTMENT OF THE ARMY

FORT WORTH DISTRICT, CORPS OF ENGINEERS

P. O. BOX 17300

FORT WORTH, TEXAS 76102

REPLY TO

SWFOD-R

11 November 1976

Mr. G. R. Herzik, Jr.
Deputy Director of Environmental
and Consumer Health Protection
Texas Department of Health Resources
1100 West 49th Street
Austin, Texas 78756



Dear Mr. Herzik:

This is in reply to the following permit applications to operate municipal solid waste disposal sites:

- a. Nos. 984 and 985 by the City of San Marcos located in Caldwell County.
- b. Nos. 753, 894, 895, 896 and 897 by the County of Nacogdoches located in Nacogdoches County.

All the applications and supporting documents have been reviewed. I find that Corps of Engineers permits under Section 404 of the Federal Water Pollution Control Act will not be required since fill materials will not be discharged into waters of the United States or in contigious or adjacent wetlands.

Thank you for the opportunity to comment on these applications.

Sincerely yours,

JOHN S. JARBOE

Chief, Reservoir Branch



November 11, 1976

SOUTHWEST REGION
Houston Airports District Office
8800 Paul B. Koonce Drive, Room 225
Houston, Texas 77061



Solid Waste - Caldwell County City of San Marcos - Permit Application No. 985 1.5 Mi. NE of Int. of FM 1984 and SH 80; 0.4 Mi. NW of FM 1984 on N Side of Missouri Kansas Railroad Coordinates: N 29° 52.95' W 97° 51.25'

Mr. G. R. Herzik, Jr., P. E. Deputy Director for Environmental and Consumer Health Protection Texas Department of Health Resources 1100 West 49th Street Austin, Texas 78756

Dear Mr. Herzik:

We have reviewed the subject proposal for a permit to operate a solid waste disposal site at the stated location and shown on the map accompanying the application.

We have previously reviewed Permit Application No. 640 and provided comments thereon dated June 23, 1976. We have also recently received a telephone report from Mr. John Burks of your office reporting that he had recently investigated the subject site and found no bird problem to exist. He further reported that continual coverage was being used.

Based on our previous inspection and Mr. Burks' recent inspection, the comments provided in our letter of June 23, 1976, are applicable to subject site, and we offer no objection to issuance of a permit to continue operation of subject landfill.

Please condition the permit on the City's continued monitoring of the site to insure compliance with Municipal Solid Waste Regulations, and should the landfill become a noticeable bird attractant that could endanger aircraft, taking whatever steps necessary to eliminate the hazard, including closure of the landfill.

Sincerely,

WILLIAM N. DALE Chief, Houston Airports District Office



## EXHIBIT 6 MUNICIPAL SOLID WASTE MANAGEMENT REGULATIONS

The regulations are available for viewing at the Texas Department of Health Resources in Austin, Texas and are incorporated herein by reference.

## EXHIBIT 7

# LETTERS OF PROTEST AND LETTERS OF SUPPORT

### The State of Texas House of Representatives

Bennie Bock II State Representative

December 13, 1976

District 38
Caldwell / Comal / Guadalupe

Mr. Jack C. Carmichael Chief, Solid Waste Branch Division of Environmental Engineering Texas Department of Health Resources 1100 West 49th Street Austin, Texas 78756

> Re: Solid Waste Disposal Sites City of San Marcos Permit Application Nos.

640, 984, and 985

Dear Mr. Carmichael:

As the State Representative for District 38, which includes Caldwell County, I am deeply concerned about the dumping of garbage in Camp Gary. As you may know, Camp Gary is located totally within Caldwell County and, therefore, as stated above, is in my legislative district. The dump, as it is now operated, poses a significant threat to the health of nearby inhabitants. Factors which contribute to this hazard are the practices of dumping raw garbage into standing water only a few feet above the groundwater level and allowing garbage to be blown off the site area. Further, the Camp Gary location is a poor choice for this disposal site. An airport is close at hand, the soil in the area is porous, water wells are nearby, and, most importantly, there are people living very near the area. A better site should be found so that San Marcos can in fact dispose of its refuse in a sanitary and safe manner.

I urge the Texas Department of Health Resources to deny the applications for Permit Nos. 640, 984, and 985.

Sincerely.

Bennie Bo

BB/ds

DEC 1976
RECEIVED
SOLID WASTE
BRANCH

STATE OF TEXAS

COUNTY OF TRAVIS

I, Jack C. Carmichael, P. E., Director, Solid Waste Management Division, Texas Department of Health Resources, hereby certify that I am a custodian of the files relating to Article 4477-7, Vernon's Texas Civil Statutes, and as such I attest that the foregoing is a true and correct copy of documents on file with the Texas Department of Health Resources relating to the solid waste matters shown therein.

GIVEN UNDER MY HAND, this 13th day of December 1976.

Jack C. Carmichael, P. E.

Director

Solid Waste Management Division Texas Department of Health Resources applications 640, 984 and 985 were heard in a common hearing. See #640 for Exhibits 8-21, inclusive.